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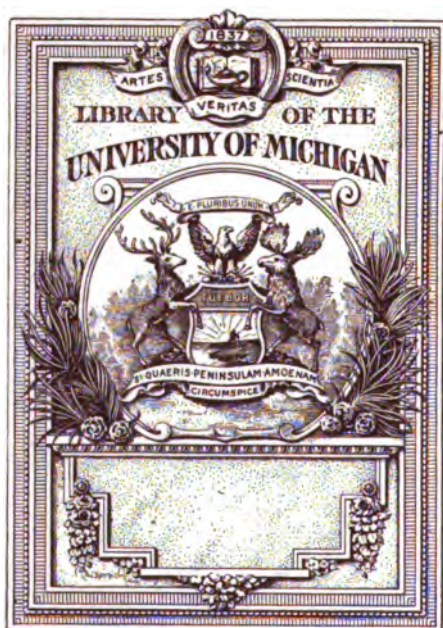
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THE MAGAZINE
OF
HORTICULTURE,

BOTANY,

AND ALL USEFUL DISCOVERIES AND IMPROVEMENTS IN

RURAL AFFAIRS.

“ Je voudrais échauffer tout l'univers de mon gout pour les jardins. Il me semble qu'il est impossible qu'un méchant puisse l'avoir. Il n'est point de vertu que je ne suppose à celui que aime à parler et à faire des jardins. Pères de famille, inspirez la jardinomanie à vos enfans.”—*Prince De Ligne*.

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Boston, December 25, 1848.

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JANUARY, 1848.

ORIGINAL COMMUNICATIONS.

ART. I. *A Retrospective View of the Progress of Horticulture in the United States during the year 1847.* By THE EDITOR.

AFTER four successive years of unusual drought in the Eastern States, that of 1847 was one of more than the average of moisture; vegetation of all kinds has been vigorous, rapid and healthy: crops have been abundant and good, and, with the exception of the still-continued potato rot, no season could yield a richer harvest. Fruit trees of all kinds have made a remarkably fine growth, and, though the fall was protracted and mild unusually late, the wood ripened well, and the promise of fruit another season is excellent.

January last was a rather mild and favorable month, with but little unpleasant weather, and with scarcely any snow. February was ushered in with snow, continued variable with more snow, and the last week of the month was severely cold. March was a rather cold month; the first week was pleasant and mild, but, up to the 22d, it continued steadily cold, and the last week was unusually severe for the season. April opened more severe than we have known it for several years; on the 1st, the thermometer stood at only 10°. It continued quite cold and unpleasant up to the middle of the month, at which time the frost was not out of the ground sufficiently to plough: it remained unusually cool to the end of the month. The first week in May was exceedingly cool, but warm weather succeeded, and, on the 10th, peaches were in bloom in warm situations; on the 15th, pears were in bloom, and, on the 26th, the apples were in full flower. The early

part of June was cool, with refreshing showers, and some damage was done to the blossoms of peach and other fruit trees in exposed situations. On the 25th, it set in exceedingly warm, with the thermometer at 95°, 96°, 92°, and 92° for the four successive days; and the following fortnight was the only dry weather of the summer. July was fine and warm, and vegetation, which had been backward, made a most rapid growth; frequent showers the last part of the month were highly refreshing. August commenced with cold easterly winds, and a great quantity of rain fell on the 5th, 6th, and 7th of the month: it continued cool throughout. September was also a cool and rather unpleasant month, with considerable rain. October was mild and beautiful, and no frost to injure even the dahlias, was experienced until as late as the 21st, at which period they were in full bloom; on the 27th, the cold was very severe, and the thermometer fell as low as 18° in the vicinity of Boston,—an unusual occurrence of cold for the season. Succeeding this, November opened mild, and continued remarkably fine up to the last two days, when the temperature again fell exceedingly low, being only at zero, a greater degree of cold than was experienced any one day during the winter of 1845. This unseasonable weather did not, however, long continue, for December, up to the time we now write, (15th,) has been one of the mildest since 1832; on the 13th, the thermometer stood at 60° at sunrise.

A finer season for vegetation of all kinds, particularly shrubs and trees, has not lately been experienced. Pears have not been so fine and large as in 1846, though the crop was much more abundant. The crop of apples was scarcely an average one. The season was never more favorable to the strawberry, and, as our readers may have noticed, in our reports of exhibitions, finer specimens were never yet seen of this delicious fruit. Grapes, owing to the lateness of the spring and the cool weather in early autumn, did not ripen near as well as in the average of years: in some situations, they scarcely attained any sweetness. Peaches were remarkably plentiful in New Jersey, Pennsylvania, and Maryland, but, in New England, they were not quite so abundant as the year previous, nor attained the same degree of excellence, owing to the cool weather of September.

HORTICULTURE.

The great and increasing interest which has been manifested in pomology, has induced us to devote many articles to the subject, and, among those in the last volume, are several of great value to cultivators. The pear and the grape, two of the most valued and delicious fruits our gardens can claim, have been particularly treated upon. In our several articles, we have described twenty-four varieties of pears, some of which were entirely new, and never described by any author: among them have been some American varieties of rare merit. In addition to these, our correspondents have noticed some of the choicest sorts, and commended their excellence: of the number, we may mention the article of Mr. Walker (p. 118). Our Pomological Notices (p. 448) have also enumerated several very new and recently introduced native varieties.

Upon the cultivation of the pear, our readers undoubtedly recollect the capital article of Mr. Rivers, nurseryman near London, whose place we have before noticed in our *Foreign Tour*, (Vol. XI. p. 169,) whose collection of pears is one of the best in England, and whose experience in their cultivation is very extensive. It is well worthy of the most attentive perusal. We have repeatedly spoken of the superiority of the quince stock for the pear, for garden cultivation, in our notes of our *Foreign Tour*, when we had an opportunity to examine the trees in the London Horticultural Society's Garden, in the Jardin des Plantes and Gardens of the Luxembourg at Paris, as well as numerous private gardens, both in England and France; and all subsequent experience, practically, has convinced us that it should be recommended to all cultivators. Mr. Rivers has, indeed, demonstrated this, if better demonstration be needed. We have, however, much information, derived from our experience, that we shall, ere long, offer to cultivators. Actual knowledge is what is needed, and the want of this has often been the means of prejudicing many against the use of the quince stock; it is well known that many sorts of pears will not unite kindly with the quince, and the consequence is, that, in a year or two,

the tree languishes and dies: this by some is set down as proof that the quince will not answer: if, however, a good list was at hand, that cultivators might know what those kinds are which will not succeed, they could guard against such disappointment, and their prejudice be thus dispelled. This is what we hope, ere long, to be able to give. Mr. Rivers has added a list of such kinds as do well upon the quince at the page referred to, and also a list of such as will not succeed; but this should be extended to the whole catalogue of good sorts. Many of our native pears, of which Mr. Rivers has had no experience, seem particularly obnoxious to the quince, and we have seen trees four years old and not *two feet* high.

Double grafting obviates this, as Mr. Rivers has stated; and it should therefore be the duty of every nurseryman, no less than the pleasure of every cultivator, to have on hand a good stock of those kinds which unite kindly, and grow rapidly upon the quince. Upon these can be grafted what are termed the "refractory" varieties, and thus, with only the loss of one more year, every variety of the pear can be produced upon the quince.

The thorn, the mountain ash, and the apple, have been recommended as a stock for the pear: of the latter, our correspondent, Mr. Humrickhouse, has already shown, (Vol. XII. p. 393,) that it cannot be relied upon with any hope of good or profitable results: the same may, we think, be said of the mountain ash. The thorn, from what little experience we have had, we think much more favorably of. Seckel pears in our collection, now four years old, have grown admirably, and the last year produced some fruit: but success will depend upon the union of the stock and scion below the ground, to prevent the latter from overgrowing the former, and endangering the tree from high winds.

The culture of the grape has greatly extended within a few years, and the superiority of the fruit over that of former years attests the attention which has been bestowed upon its cultivation. We have endeavored, by a series of articles in our several volumes, to give all the information which the amateur could want in the management of the grapery or cold house: and, in our last volume, our article on its growth in

the conservatory or greenhouse, accompanied with a record of the daily temperature, &c., we trust has been found to answer the object intended: our diary for the treatment of the grape in the hothouse has been commenced, and, at a future time, we shall give the results in the same style as in the article alluded to.

The subject of root-pruning has been fully elucidated in our last volume; and the most skeptical cannot fail to be interested in the discussion, if not convinced of its utility. Repeated transplantation, to accomplish the desired object of early bearing, is acknowledged by all; and how far does root-pruning differ from transplantation? In no respect, save that it is unnecessary, as it often may be inconvenient, to remove the tree. It attains the desired object. The mere removal of the tree would be of no avail if the larger roots were not rent asunder, and root-pruning does this, at the same time reserving, what is most important in transplanting all trees, the fibrous roots.

The cultivation of the peach in cold houses has been ably treated upon in an article by Mr. Cowan, (p. 204.) The peach crop is so likely to be injured or cut off in the New England States, that its cultivation under glass is increasing. To those who are introducing it into cold houses, either alone, or with the grape, Mr. Cowan's experience will be read with great interest. Root-grafting the peach has been mentioned, by our correspondent, Dr. Philips, (p. 49,) as a very successful mode of propagating it, producing a fine head the first season, and performed with every certainty of success. No great advantage can be gained by this mode of propagation over that of budding. Still it may be practised in some cases where budding has been neglected, and a season saved in securing some new and valuable variety.

Some new varieties of the strawberry have been recently produced in Ohio, an account of which we have given at p. 367. Their qualities have been rather highly praised, but they require the test of longer cultivation to establish their merits. It is somewhat doubtful, however, if they have not been overrated. Some writer, in noticing the report of the Cincinnati Horticultural Society upon Mr. Burr's seedlings, has pertinently asked, "Are they as good as the old sorts?"

"Are they better?" "Do they supply any deficiency in the old sorts?" or "in *what respect* do they claim admission among standard strawberries?" These certainly are proper questions for the committee to answer. Seven *new* seedlings are named and described, and those who purchase ought to know what *different* qualities they can possess that should entitle them to a name. A strawberry may be remarkably early, remarkably late, or remarkably large and high-flavored, but beyond these three great characteristics, it will be difficult to raise new kinds which will excel, or even equal, the old ones.

Among the new pears which have fruited this year for the first time, the following have proved valuable:—St. Dorothee, a November pear of good size; Excellentissima, another of the same season, large and fine; Belle Apres Noël, a winter fruit, handsome and excellent. Others which have proved desirable are the Reid's Seedling, Swan's Orange, Kingsewing, Captif St. Helene, Doyenné Santelete, Ferdinand de Meester, Henrietta, Chapman, Figue, Colmar d'Aremberg. The experience of another season has also confirmed the high character of the Hull, Beurré d'Anjou, Doyenné Boussock, Pratt, Doyenné d'Été, Beurré Crapaud, Ananas, Las Canas, &c. Many new apples have been noticed, and several described and figured; but we would refer to the articles themselves, as also to the articles which we have commenced, describing and figuring new plums and cherries.

FLORICULTURE.

The increase of floral taste has not been so great as the ardent amateur could wish. The interest of many cultivators has been drawn away by the engrossing subject of fruit culture: not that we would be understood to say it has everywhere been so; but, in the vicinity of Boston, we regret that this has been the case; for no one could have witnessed the exhibitions of the last three years and not perceive this. Very large premiums have been awarded to collections of fruit, and, though those for flowers have been liberal, they have been too small, in comparison with the former, to secure that interest which is the sure indication of an increasing taste for fine objects of culture. We hope, however, to report a bet-

ter state of things, and we have good reason to believe that something will be done to restore the former interest in this department of gardening.

In our last volume, we have endeavored to awaken a greater zeal among cultivators for the growth of that brilliant plant, the pelargonium, which is now eliciting so much attention in England, and which forms one of the main objects of attraction at all the great floral shows of the London Horticultural, and Royal Botanic Societies, of London. No person has done more to improve this beautiful flower than Mr. Beck, whose article, complete in every particular, we gave in our last volume, (p. 34,) and also a descriptive list of his seedlings. Few of our cultivators know to what perfection of culture the pelargonium may be brought in the hands of good gardeners: they are not the lean, lank, and spindling plants we have been used to see, with a few straggling trusses of flowers on the top; but they are now stout, dwarf, and immense plants, *ten feet* in circumference, and covered with a profusion of flowers and foliage, which render them unequalled as specimens of skill and beauty.

That exquisite tribe of plants, the heath, has been admirably treated upon by Mr. Cadness, (p. 167.) Indeed, we know not when we have given our readers an article more thoroughly practical. If the heath is not often seen in a healthy and flourishing condition, it will not be for want of information, but rather for the neglect of applying it to their growth and treatment.

The science of culture has been most ably elucidated by the admirable papers of Mr. Kennedy, in which the propagation of plants, by all the modes in general use, has been laid down in the plainest and most concise manner. To these we may refer the young practitioner, as well as the more experienced amateur, for all the information they may need to propagate successfully, so far as it can be done without the aid of long-continued experience. In connexion with Mr. Kennedy's articles, we may also refer to the many valuable extracts in our Foreign Notices, which embrace all the really useful information which we could glean from our foreign periodicals. The dahlia, (p. 229,) Azalea, (p. 326,) Pansy, (p. 327,) Tea Rose, (p. 416,) Scarlet Pelargonium, &c., are

instances of the thorough manner in which these articles have been written.

Some new plants have been added to our collections the past year, the most noted of which are *Anemone japonica*, a fine half-hardy (or hardy) herbaceous plant, flowering late in autumn; *Campánula nobilis*, also a hardy plant; *Verónica Lindleyana*, not so showy as *speciosa*, but rather a desirable plant; *Abutilon venosum*, similar to the old *striatum*, but with flowers more than twice the size; *Schubertia graveolens*, a climbing plant of great fragrance and beauty; *Calystegia pubescens*, also a beautiful climber, and likely to form a valuable summer plant for the open air; *Céstrum aurantiacum*, a remarkably showy fall flowering plant, with deep yellow blossoms. Many new and fine phloxes have been introduced, the most distinct of which are, Standard of Perfection, Speculum, Göethe, Fleur de Marie, Cromwell, and Eclipse. The rapid improvement in this flower shows how much may be accomplished by the well-directed efforts of zealous amateurs. Few plants have added more to the beauty of our greenhouses, during the summer, than the different species of *Achimenes*, of which we now have ten or twelve kinds: the new ones are *pätens* and *Lehmánii*, both dwarf, growing and desirable plants.

The great similarity of many of the new kinds of fuchsias has disappointed purchasers, and, consequently, but few have been introduced the last year; these few, however, have been rather distinct and desirable; *Acantha*, a new light one, with pure white sepals, and a bright corolla; *Nymph*, with blush sepals and pink corolla; *Empress*, *Lady of the Lake*, *Sir H. Pottinger*, *Vesta*, and *Mrs. Milbank*, are also fine varieties. The management of the fuchsia does not appear to be well understood by our cultivators, for we have seen but few such fine specimens as we noticed in various collections in England. *Macrantha*, *serratifolia*, and *corallina*, three splendid new species, remain yet to be introduced.

ARBORICULTURE.

It is gratifying to see a greater taste extending for fine ornamental trees, particularly the weeping kinds and the *Coniferae*.

The Paulownia, the Deodar cedar, the cedar of Lebanon, the Lucombe oak, the *Araucaria imbricatâ*, and other equally fine trees, are now prominent articles in the catalogues of every extensive nursery establishment. Each of them have stood the winter as far north as the latitude of New York, and all have been tried, except the *Araucaria*, in that of Boston, and found perfectly hardy. The latter, we hope to make a trial of another winter, when the plants are stronger. Nothing will add more to the beauty of a place than a good variety of the finer Coniferæ, such as the above kinds, the true Silver Fir, Norway Spruce, Siberian Arbor Vitæ, &c.

The weeping trees, and smaller ornamental trees, grafted as standards, are also fine objects for lawns, or for situations where they will form prominent features of the landscape. The weeping elm, beech, lime, mountain ash, oak, hornbeam, ash, &c., are of the former class, and the *amelanchiers*, *prunuses*, *cratæguses*, *sorbuses*, *lilacs*, &c., of the latter.

The only thing now wanting to introduce more speedily all the finer ornamental trees into general cultivation, is the establishment of arboretums, or, if not arboretums, according to the construction of the late Mr. Loudon, plantations of specimen trees, where the habit of growth, peculiarity of foliage, general aspect, and all other characteristics, can be distinctly seen by the purchaser. Some definite idea can then be formed of each and every tree, and their desirableness for the purposes of ornamental landscape. This plan has been adopted by all the leading commercial gardens of Britain, and the consequence has been an immensely greater demand for trees of every description. Those who rely upon the nursery row to show off their stock, will be left behind, and their limited sales will be the best evidence of their want of industry and intelligence, in keeping up with the advancing spirit of arboricultural improvement.

The great pertinacity with which our people adhere to one thing cannot be better exemplified, than in the general desire to plant elm trees in preference to all others. We certainly shall not deny the magnificence of a fully grown elm; but yet we would by no means plant it in front of every dwelling: there are several other trees which are equally as well, and, in many instances, where the house is near to the street, much

better adapted for the purpose. The silver maple is one of these, growing with the rapidity of the elm, forming a graceful head, with beautiful silvery foliage, oftentimes a drooping spray, and with one of the cleanest and smoothest barks of all our many fine trees. Michaux states that, on the Ohio, where it grows abundantly, he always "contemplated it with unwearied admiration." We would highly recommend it as one of the most attractive shade trees we possess.

RURAL ARCHITECTURE.

Rural Architecture has received less of our attention in the past volume than in many of the preceding ones: this has not been, however, on account of there being less interest manifested in it, but rather from the greater desire for pomological information.

The taste for cottage and villa residences has undergone a great change within a few years. Formerly, every dwelling was formed after some Grecian model, and without the thought of fitness or propriety, farmhouses, schoolhouses, banks, churches, &c., were all the same unmeaning representation of some Grecian temple. Now the rural Gothic prevails, and with the same ambitious desire to make every building, no matter how humble, complete in all its details—the same unmeaning expression is stamped on all. Verge boards and gables, without any reference to the form, or size, of the building, are the features which are to give it the Gothic air. This is to be much regretted. But the only remedy lies in the dissemination of a true architectural taste. Few men who build know what they in reality want; they entrust, therefore, their views to the carpenter rather than the architect, and with the idea, too common with many of the former, of mistaking profuseness of decoration for beauty and expression, often destroy the completeness of a very well arranged plan.

Many very beautiful villas have been erected in the vicinity of Boston, and the improvement of the cottage architecture of New England generally has been very great; there is yet room, however, for still greater improvement. We hope to find the opportunity, in the course of the present volume,

to give some plans which will aid in disseminating the taste which is now accomplishing so much for Rural Improvement.

COMMERCIAL GARDENING.

The demand for trees and plants continues to be nearly equal to the supply, notwithstanding the increased number of nurseries which spring into notice every year. This increase of taste is gratifying to every lover of Rural Improvement, and more particularly as it is not confined to the immediate vicinity of our cities and flourishing towns, but extends to the remotest parts of the country. We have recently had sent to us a catalogue of a nursery in Wisconsin, which contains more than twice as many kinds of fruit as the catalogues of some of the most extensive nurserymen around Boston or New York twenty-five years ago.

In the vicinity of Boston, the greatest demand has been for pear trees: many new kinds have been added to the various nursery collections, and the proprietors are increasing their stock as rapidly as possible. In Salem, Mr. Manning, as heretofore, has fruited the largest number of varieties of any one establishment in the country: scions of nearly or quite all of them, amounting to three or four hundred kinds, are offered for sale from bearing trees. Messrs. Putnam of the same city have a fine stock of young pear trees, which, in the course of a year or two, will be ready for sale.

Messrs. Winship and the Kenricks have, as usual, large and good stocks of trees: Messrs. Hovey & Co. have added very largely to their stock of all kinds of trees. The number of specimen pear trees planted on the borders of the walks has been increased the past year to a *thousand*, more than one hundred kinds of which are now in a fine bearing state. About *eighty* varieties of cherries, and a great number of plums and apples, also promise a fine crop the coming season. Messrs. Wilder, Walker, and other cultivators, have quite a number of trees ready for sale.

In Worcester, Lowell, Plymouth, New Bedford, Springfield, Providence, and other large towns and cities, new nurseries have been recently established, and the older ones have greatly increased their stock and facilities, for supplying trees.

In New York, Philadelphia, Baltimore, and other southern and western cities, we have no returns from our correspondents, but we believe a very large and profitable business has been done the last year.

GARDEN LITERATURE.

The year has not been prolific in Horticultural publications: the principal works have been reprints, and new editions. Bridgman's *Gardener's Assistant* has passed to a new edition; Downing's *Fruits and Fruit Trees* has also reached the seventh edition, and the colored copy, with 70 plates, has also appeared; a *Dictionary of Modern Gardening* by G. W. Johnson, edited by D. Landreth; a new edition of the *New England Book of Fruits*. The new works are, *The Culture of the Grape* by J. F. Allen: *The Rose, its History, &c.*, by S. B. Parsons, which will be reviewed in a future number; and our *Fruits of America*, a new periodical to appear every other month, in royal octavo and quarto size, with elegant colored plates, three numbers of which have already appeared. Part VIII. of Colman's *European Agriculture* has appeared; and two more numbers complete the work.

ART. II. *Norton's Melon Apple.* By MESSRS. ELLWANGER & BARRY, Nurserymen, Rochester, N. Y.

DEAR SIR,—The apple which you figured and described in the last number of your Magazine as the "Melon," was described by us, in the *Albany Cultivator* of February 1845, and in the *Boston Cultivator* of March of the same year, as "Norton's Melon," as you will find by referring to these papers. We prefixed "Norton's," as we then stated, "to designate it more particularly," as there was another apple in this vicinity which has been known and cultivated as the "Water Melon" for upwards of thirty years, and as we obtained the first specimens of the fruit which brought it to our notice from Major Reuben Norton of Bloomfield, in whose orchard,

and that of his neighbor, Mr. Chapin, who either brought it from the east, or originated it, the only old trees that we know of, now stand.

Since we first noticed it, we have propagated and disseminated it extensively under the above name, being, in our opinion, a fruit of the first quality of its season. We have repeatedly sent specimens to eastern pomologists with the view to identify it with some eastern variety, as it was a matter of uncertainty whether it was brought from the east or originated in Bloomfield, but we have not been able to trace it to any other source than that where we first found it. Our description and yours agree pretty closely, but you err in season of use. Instead of "September and October," it is in eating from October till March: we have eaten them in fine condition in the middle of the latter month.

It is somewhat strange that Mr. Smith, in communicating with your society, should have overlooked these facts in the history of this fruit. It could not be unworthy of note that it had been described three years ago, in the leading journal of Agriculture and Horticulture in the state where it was found and ever since propagated and sold, under the name then given for plain and proper reasons.

We have thought it might be well to place these facts before you and your readers, for the purpose of preserving, as far as possible, uniformity of nomenclature, an object which, we are happy to know, your society and others have already taken some new and important measures to attain.

Rochester, N. Y., December 1847.

Had we been aware of any description of the new apple in question, we should have looked it up before the publication of our own. The agricultural papers of the country are now so numerous that we do not pretend to look out the little pomological information which they may occasionally contain. Messrs. Ellwanger & Barry have long been our correspondents, and if any new fruits had come to their notice, we supposed they would have communicated the descriptions through our pages, where they would meet the eye of all the principal cultivators in the country. It is scarcely to be expected that pomologists will look to agricultural papers for *descriptive*

accounts of *new* fruits, when there are the legitimate channels—Horticultural periodicals—for the express purpose of communicating such information; and this instance only shows the importance of describing fruits where they will come immediately before cultivators. If the above apple had been thus merely noticed, we should have at once referred to the first published name: this would have prevented the accumulation of synonyms: as it now is, this variety has been described under *three* names, all of which would have been avoided, had our correspondents sent their account of it to us. The Massachusetts Horticultural Society have recently described it as the Water-melon, the fruit committee not knowing any thing of the apple except what was communicated in Mr. Smith's letter.

We are aware that the Massachusetts Horticultural Society, and some other Horticultural Societies, have recently announced certain rules which they have established for "American Pomology." We intend soon to notice them at length, and give our objections to such a standard of rules. To arrive at a correct nomenclature, pomologists have only to be governed by one rule—priority of name. If this is done, but few synonyms would find a place in our catalogues of fruits.

Since the above came to hand, we have taken the pains to look up the article referred to in the Boston *Cultivator*, and, after a careful reading of the account of the Melon apple, we do not see any reason to alter our name. Our correspondents say that it was known "as the Melon apple, and that they have prefixed the name of Mr. Norton, from whom they received the scions." Nothing is said about another apple known as the Water-melon. This, however, does not make a material difference. If it was well known as the "Melon," and cultivated under that name, that must be considered the legitimate title. The simple fact of receiving the scions from Mr. Norton would not justify the addition of his name. On such slight grounds, we might alter the name of every fruit under cultivation. If we recollect rightly, Mr. Barry has already conceded this in the *Genessee Farmer*, where he properly repudiates the re-naming of fruits, and, in a notice of the Oswego Beurré pear, adheres to the legitimate name of

Reid's Seedling, under which it was well known and long cultivated, previous to a published description of it under the cognomen of the Oswego Beurré.

We have some remarks in preparation on the subject of nomenclature of fruits; but we must repeat that, beyond the rule we have already announced, as governing us—priority of name—but little can be offered other than suggestions as to the best means of preventing an accumulation of synonyms.

Our drawing of the Melon is the *exact* size of two or more of the specimens sent by Mr. Smith to the Massachusetts Horticultural Society. Not having, as we have already observed, seen any description of it previous to our account, we stated the season to be October and November, (*not* September and October,) at which time those we tasted were nearly all over-ripe.—*Ed.*

ART. III. *Descriptions and Engravings of Select Varieties of Apples.* By the EDITOR.

WE continue our descriptions of the finer kinds of apples from our last volume, and, during the year, we shall make many additions to the number already described.

So much attention has been bestowed upon the pear, that the apple has not received that notice due to its importance as one of the most valuable fruits we possess. Much confusion exists in the nomenclature of the apple, and it will be a principal object, no less than to give a full description of the fruit, to aid in establishing correct names, identifying kinds, and detecting synonyms.

X. RED ASTRACHAN. *Hort. Soc. Cat.* 3d Ed.

The Red Astrachan, (*fig. 1.*) is a tolerably well known, much esteemed, and an exceedingly beautiful apple. It is a native of Sweden, and was first imported into England about the year 1816, when it fruited in the garden of Mr. Atkinson, of Grove End, near London. At what period it was introduced into this country, we are not aware; but it is a com-

paratively new, and but little disseminated variety. Its earliness, combined with its great beauty and good quality, will claim for it a place in every collection. The skin is covered with a bloom as rich and beautiful as a plum.

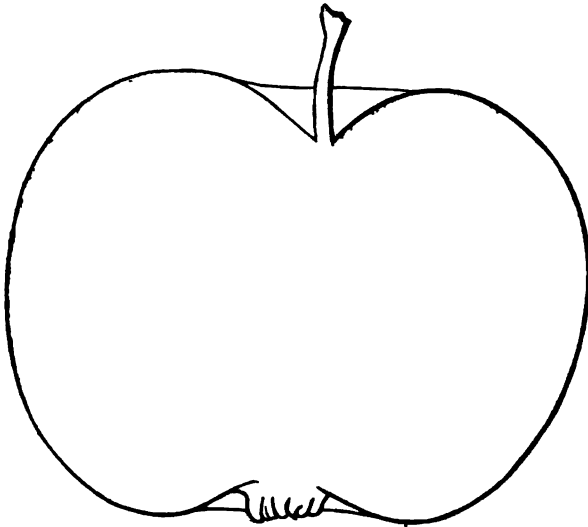


Fig. 1. Red Astrachan.

Size, large, about three inches broad, and two and a half deep: *Form*, roundish, flattened at the base, and narrowing little towards the eye: *Skin*, very fair, smooth, rich brilliant crimson on the sunny side, paler in the shade, though occasionally little greenish, sometimes russeted around the stem, dotted with large yellow specks, and covered with a thin whitish bloom: *Stem*, short, about half an inch in length, rather stout, straight, and moderately inserted in a broad, rather shallow basin: *Eye*, rather large, partially closed, and slightly depressed in a broad, shallow, and somewhat ridged basin: *Flesh*, white, with occasional stains of pink, fine, crisp, and tender: *Juice*, tolerably abundant, subacid and good: *Core*, large, rather close: *Seeds*, small, ovate. Ripe in August and September.

XI. BENONI. *American Orchardist.*

The Benoni, (*fig. 2,*) is one of the finest of our native early apples, possessing a sprightly, rich, and high flavor. Compared with the Williams, Summer Rose, Red Quarrenden, and others of its season, it is decidedly superior to either of them, and it merits a prominent place in every choice collection of apples.

It was first introduced to notice by Mr. E. M. Richards of Dedham, who sent us a brief account of it in our first volume, (p. 363.) It had, however, been previously noticed by Mr. Kenrick, in the first edition of the *American Orchardist*. It originated in Dedham, where the original tree is still growing. It is a most abundant bearer every other year. The growth of the tree is vigorous and erect. Its period of maturity is between the Williams and Summer Pearmain.

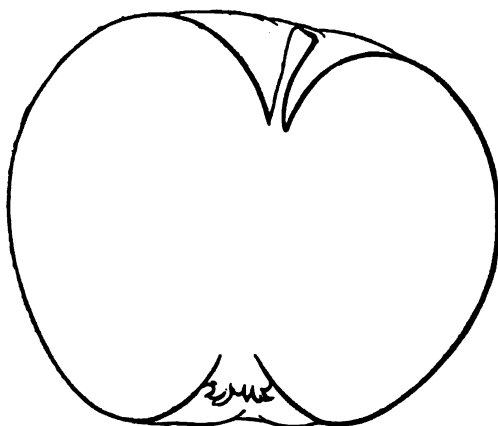


Fig. 2. Benoni.

Size, medium, about two and a half inches broad, and two and a half deep: *Form*, roundish, narrowing towards the crown, which is angular: *Skin*, fair, smooth, deep yellow or orange, distinctly striped with red and dark crimson, and covered with scattered whitish specks: *Stem*, very short, scarcely half an inch in length, slender, and deeply inserted in a rather contracted cavity: *Eye*, rather large, partially open, and considerably sunk in a deep, open, furrowed basin: *Flesh*,

yellow, fine, crisp, and tender : *Juice*, abundant, rich, vinous, high-flavored, and excellent : *Core*, medium size, close : *Seeds*, medium size, pale brown. Ripe in August and September.

XII. GARDEN ROYAL.

Mr. Manning, of the Pomological Garden, first introduced this apple, (*fig. 3*.) to our notice, and, the past season, gave us some fine specimens, from which our drawing and description have been made. It originated in Sudbury, on the farm of Mr. D. Bouker, and the original tree now produces very fine crops, which bring a good price in the market. It is certainly one of the tenderest fleshed apples we have ever eaten, and possesses a flavor as delicate as some pears. It is rather below medium size, but it is of regular form, and a very handsome fruit. We esteem it as one of the very best apples under cultivation ; its size only prevents it from being placed at the head of all our early autumn apples.

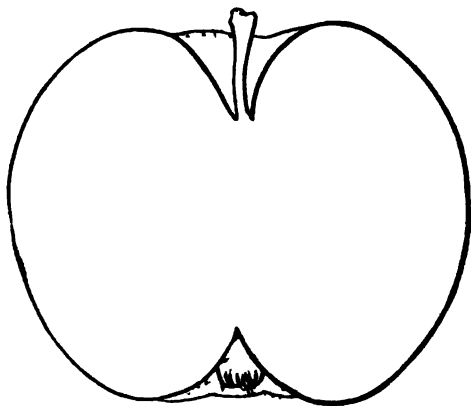


Fig. 3. Garden Royal.

Size, medium, about two and a half inches broad, and two and a half deep : *Form*, round, very regular, and slightly flattened at each end : *Skin*, fair, smooth, with a rich, deep yellow ground, nearly covered with distinct stripes of deep orange-red and dark crimson, and dotted with scattered yellow specks : *Stem*, short, about half an inch in length, slender, straight, and

deeply inserted in a regular cavity: *Eye*, small, partially closed, and moderately sunk in a medium-sized, slightly furrowed basin; segments of the calyx long, twisted: *Flesh*, yellowish, tinged with pink, fine, crisp, and remarkably tender: *Juice*, abundant, pleasantly acid, and vinous, with a rich, spicy aroma: *Core*, rather close: *Seeds*, rather large, light brown. Ripe in September.

ART. IV. *Note upon Denniston's Superb and Albany Beauty Plums.* By the EDITOR.

IN our December number of the last volume, (XIII. p. 531,) we described four varieties of plums, raised by Mr. Denniston, in his celebrated plum garden at Albany.

The fruits from which we made our descriptions and engravings were kindly sent to us by our correspondent, Dr. H. Wendell, of Albany, who gathered them in company with Mr. Denniston, from the original trees in his garden. By some mistake, however, probably in the hurry of packing, the names which accompanied the specimens were accidentally transposed, for we learn from Dr. Wendell, that the variety described by us as the Albany Beauty is Denniston's Superb, and Denniston's Superb the Albany Beauty.

We are glad, therefore, to be able to make this early correction of the error in regard to these two fine varieties.

ART. V. *Notes on some of our Native Plants.*
By J. L. R.

WHOEVER is familiar with the white-pine woods of New England, must have observed a species of evergreen-leaved plant that is their most common inhabitant. Its rich, dark green, glossy leaves, supported on upright stalks and radiating somewhat in a verticillate manner, may be seen among the fallen needle-shaped foliage of the pines, contrasting their own vividness with the sere and brown carpeting which the latter

forms. Its root is long, and creeps just beneath the soil, scarcely distinguishable from the stem, unless by its scattered fibres: the stem itself ascends to the height of about six inches in length, of a tough and somewhat woody consistence, bearing the leaves on the summit. These are not properly verticillate, or whorled; for sometimes, two or three partial verticils may be found: they are one or two inches long, half to three quarters of an inch wide, sharply serrate on each edge, smooth, shining, thick, and coriaceous, rather obtuse at the end, but tapering at base to a short petiole. From the bosom of the upper whorl, arises a peduncle or common flower-stalk, bearing four to six flowers. The beauty of these, forms one of the most attractive instances of early summer elegance. They can be compared to nothing so well as to the unique flowers of *Hoya carnosa*, the asclepiadeous runner, which is such a favorite of the greenhouse; having the same artificial or artistical waxen contour and finish. The petals are *unlike*, however, in being obovate and concave, of a reddish white, with a violet tinge; while the style of inflorescence is also distinct. Although having no botanical affinity, yet one is reminded of the latter plant, from the peculiar beauty of the former. At least, such has been often the case with me; and I have sometimes doubted which of the two was really the most attractive.

The reminiscence of this very common plant carries us back from the present cold and wintry aspect to those delightful balmy days of June, or more ardent ones of July, when the murmur of the wind among the pine tops invites to quiet and repose, and tempts us to stretch ourselves at ease on the sweet and soft carpet of the ground beneath, breathing spicy and terebinthine odors, considered so salubrious as well as, in reality they are, grateful. There are not many flowers which court these shades, and scarcely can any underbrush or smaller growth of woody plants flourish in the glimmering shade of the white-pine woods. The few delicate species which obtain, seem, on this account, all the more attractive; while there reigns an air of indescribable comfort, in which the senses, though not inactive, are yet inclined to calmness and self-possession. The trees themselves are objects of singular beauty; and there is scarcely any forest tree which

possesses so many advantages of attraction. Constantly in verdure, and flourishing in compact and comparatively close proximity to each other, a young growth of white pines could not escape notice. Whorl above whorl in regular succession, each marking the annual upward increase, the bright green bark, almost entirely free from any mossy or parasitical adherents of lichens or such minute vegetation, the slender, taper, and graceful leading-shoot, the long needle-shaped leaves, with the aspect of healthy vigor, contrasting strangely with the nature of the soil,—all these cause the white pine to be equally attractive, whether under cultivation or in natural growth. It is, accordingly, becoming a popular tree for planting in rows on the borders of parks or pleasure grounds, gardens needing protection from the winds, and for covering light and sandy tracts with a most valuable produce.

As the growth of the white pine copses or native woods increases, there is observable that struggling for possession which the laws of nature seem to dictate for self-preservation. A thinning process goes on rapidly through the greater vigor of some of the trees overtopping and burying in shade the others, which slowly die, like the lower whorls of branches on the larger trees themselves. A young growth and an old forest scarcely seem identical in species,—the first intertangled with horizontal whorls of pliable branches, the latter resembling some stately columns of some grand building, with sighing or sweetly sounding aisles, echoing with the music of the solitary thrush, as it pours forth its mellifluous song from the topmost twig of the loftiest and most towering of the growth. As the trees grow older, their trunks become more rugged in bark, and the lichens predominate over other parasitical forms. In the chinks, are purple *Jungermannias*, with occasional tufts of *Orthotrichum*; at the base, are dot-like *Lecideas*, and disk-shaped *Lecanoras*, and wart-like *Verrucarias*. A few of the stellate forms of *Parmelia* may be found here and there; and, perhaps, a waving tuft of gray *Urtica* is occasionally pendent from the dead lower limbs.

The white pine, called by botanists *Pinus Ströbus*, is considered in England a fine tree, being introduced into that country from Canada upwards of a century ago, and known under the title of its first propagator there, as the Weymouth

pine. It is agreed that it is the most stately tree of our forests, rising in a straight column to the height of even one hundred and forty feet. Some have been known greatly to exceed this measurement; the size, in length of trunk and girth, seeming to depend on the soil in which it grows. There seems indeed to be scarcely any other native tree of so much importance, so wonderfully adapted to different soils, as is this. I have seen it transplanted with perfect success on the most arid sandy plains and hills, where scarcely any thing seemed to compose the soil but sharp and minute angular particles of quartz, the residuum of the granitic formations about this section of the State. An analysis of such drifting sands would, however, probably detect a considerable portion of alkalis, with more or less woody or vegetable matter, accumulating from the decay of those hardier grasses, which dare to grow in company with the exquisite *Polygonum articulatum*, and a few such like plants. Then, again, vigorous growths will suddenly spring up on our old ploughed fields, when they have been disturbed by the plough after several years of neglect of culture. On some such lands, this forest growth becomes, by far, the most profitable crop the farmer can raise, and repays all his care to protect it from injury. In rocky pastures may be found clusters of these trees attaining great size; and in draining low and swampy spots, to procure peat for fuel or to restore them to a more valuable produce, such as the English grasses for hay, roots of this species of pine, of immense size, are found deep beneath the surface, intermingling themselves like some gigantic net-work, and denoting a most luxuriant vegetation on spots which must have been little more than quagmires, and at a period before the memory of the earlier settlers. These roots indicate scarcely any traces of decay, and present to the axe an inner surface perfectly sound, and apparently imperishable. In some portions of the country, where fuel is abundant, they are set up on edge, or with the under surface facing the road which bounds the fields enclosed, to make rude fences, in which position they are said to last upwards of an hundred years; and where wood, as an article of fuel, is more scarce, these roots are cut transversely into properly-sized portions, split, stacked, and dried for use as an article of combustion.

The position of such roots in sunken and sphagnous spots, may throw some light on the origin of the coals, such as bituminous and anthracite. Centuries may be requisite to convert these woody structures into such coals; and yet some sudden cataclysms, such as doubtless often occurred in the larger coal regions, producing immense pressure which these vegetable masses would sustain, by the sinking of the soil or overwhelming of it by a change in its position, might so modify beds of sunken vegetable matter as to convert them into combustible coals, in which the original structure would yet be preserved. Delicate sections of our American coals, submitted to the microscope, have indicated the organic structure of the *Coniferae*; and at this moment there may be existing around us, the "Vestiges of Creation" of similar processes as were in existence when paroxysmal upheavings of the earth's surface changed the aspect of this continent.

The white pine grows with exceeding rapidity when we consider its great value. Transplanted, as I have already stated, it flourishes with remarkable vigor. The best season of the year for doing this, is from the middle of April to the first of June. At this time, the young shoots for the next year's development are pushing; and even when these are two or three inches long, they can be safely transplanted. I have seen plantations of hundreds made in this way, with scarcely a failure, and lately heard of a similar one with equal success.

In some years, the seeds are produced in great abundance. These are contained in long, slender, cylindrical, and rather curved cones, made up of numerous loose scales. A seedling pine attains, the first year, to the height of two or three inches. Numerous specimens of such infant trees may be found under any old trees, few of which, however, arrive at maturity, or attain to any size, unless at some distance from the parent stem. The seeds may be loosened from the cones by spreading the latter in some warm, sunny place, free from mice, where they will spontaneously open and the seed will fall out. Each seed is furnished with a thin, chaffy vane or wing, which needs rubbing off, before sowing. Artificially sown from seed, they may be drilled thinly in rows where destined to remain, or more closely for subsequent thinning

and transplanting. Some plant the entire cone, which is done in the case of the *pitch pine*, whose cone is smaller and more rigid; but this must be an evident waste in both cases. Any light, thin land will answer for such nurseries, perhaps better in consequence of being freer from weeds and less valuable for other culture.

The recollection of the *susurring* of the lofty pines, and of their agreeable shade in summer, quite led me away from my little sylvan favorite which grows beneath them, and expands its exquisite blossoms year by year, as the estival months come back in annual succession. Cultivation of the tree seems more easy than that of its humble companion. The peculiar dryness of the soil and the nature of the shade perhaps could not be very well imitated in the garden, to a degree favorable to cultivating it. I know of no attempts to introduce it as a garden flower; but surely it deserves a place among the gems of the florist's care. Artificial belts and coppices of the white pine ought to be adorned with the wintergreen, or *pipsissiwa*, as the Indians call it; more classically known in botany as *Chimaphila umbellata*, a beautiful allusion to its hardy habits, denoting, in its etymon, *a lover of winter*. Its astringent and spicy-bitter leaves are also reputed as a popular medicine; yet more value, I suspect, is to be found in the beauty of its flowers than in any pharmaceutical point of view. To the eye of the observer of native elegance, the *chimaphila* of the pine woods will always present a subject for his attention, at whatever season of the year he may chance to see its hardy and verdant foliage.

We take leave of the dark-foliaged wintergreen, to look after its more rarely found sister and co-species, the *Chimaphila maculata*. Darlington tells us, in his *Flora Cestricea*, that *this* species is called erroneously, by Pursh, the *Pipsissiwa*, the same as we have seen belonging in truth to the *C. umbellata*. The present species has a general resemblance, but is much more unique. It seldom grows so large, and is never so plentiful; at least, I never have seen any instances of its occurrence where more than a dozen or two plants could be found at a time. I recollect many years ago seeing the plant for the first time at the Botanic Garden in Cambridge, where it was carefully preserved by Mr. Carter, the skilful

gardener of that place. That plant was gathered at Newton Falls, and I believe survived several seasons, under cultivation. The next time I saw the *Chimaphila maculata*, it was growing in a native locality on the banks of the Hudson River, at Fishkill Landing. It disappeared from that spot shortly after, where I have since sought for it in vain. Then, in the rich beech woods of Pennsylvania, among the dry, old, brown leaves which covered the ground, some years afterwards, I detected a patch of it, forming a conspicuous object. In the month of October, 1845, I found another similar group of plants of this species, growing in the chestnut woods which are so common at Northborough, in this State. Visiting this locality during the past spring, I brought home with me a little clump of the roots, to attempt its cultivation. Accidentally, as it were, a single specimen came in my way, while walking with a friend in the close vicinity of my residence, growing near the footpath which led through a thick piece of brushwood. This was in flower, and was the first specimen in that condition that I ever found. The spot was carefully marked, and I trust to see its root increasing from year to year, or to ascertain whether it disappears normally from any habitat, as do some other kinds of plants, found occasionally only, and at rare intervals.

The roots of the Spotted wintergreen, (*Chimaphila maculata*), are long and creeping, extending just beneath the surface of the earth, and, when found in old woods, insinuating their fibres among the decayed vegetable remains which lie on the ground. The stems are tough, woody, inclining or tending partially to an upright position, of a dark red color, bearing two or three partial verticils of leaves, which, in the specimen before me, are in threes, with acutely and sharply serrate edges, each leaf tapering to an acute point, and furnished at base with a short petiole, into which the leaf gradually changes. Beneath these regular whorls may be seen, on some of the stems, a pair of ovate and smaller leaves. The lower surface of the leaves is of a dull purplish hue, while the upper surface is smooth, dark green, marked, throughout its entire length, with a broad white line, from which shorter and narrower ones acutely diverge, somewhat in the form and figure of a venation. A few little bracts may

be also distinguished on the stem, especially when young. Some irregularly shaped, brown *spots* are to be seen, also, on the upper surface of the foliage, from which, perhaps, its specific name is derived. From the upper whorl of leaves rises a common footstalk, supporting two or three flowers, having white petals, of a broadly obovate, concave form, and, while not so beautiful as those of the true *pipsissiwa*, are superior in the fact of possessing a delicate odor, of a peculiar character. Sometimes it happens that only one of the flower buds expands into blossom: the present species has always, however, the merit of its singularly striped foliage, which causes it to be regarded as an object of curiosity.

The little clump of roots which I brought from Northborough, I potted in a mixture of vegetable mould, chopped sphagnum, and decayed leaves; and, shading it from the sun under some bushes in the garden, with frequent waterings, it produced me a flower stalk having a single blossom; being the only bud of sufficient strength to come to maturity. It afterwards made a fine new growth, and is at this moment on my table, looking as if it was as well established in its new home as it ever was in its native locality. For three weeks, this single blossom continued fresh in my room, shaded from the sun. No seed-vessel, however, was produced, probably owing to deficiency of opportunity for impregnation. I consider it a pretty pot plant, certainly of as much merit as *Cyclamen hederæfolium*, which is cultivated with so much care. The species may, perhaps, be classed as among the "*plantæ rariores*;" or, as florists would say in plain English, it is a "rare plant." As such, I shall preserve it,—more, however, for its own beauty; more, still, as a memento of pleasant hours amid its sylvan home.

This species, according to Menzies, is indigenous to the Northwest Coast of North America, as Nuttall tells us in his *Genera of North American Plants*. Several other species are also enumerated in the Flora of the United States, by some botanists; but these belong to another section, and go under the name of *Pyröla*, of which we have, in the vicinity of Boston, several, which claim attention for their own intrinsic and peculiar merits.

South Hingham, Dec., 1847.

ART. VI. *On the Cultivation of the Dahlia in Private Gardens.* By JAMES KENNEDY, Gardener to S. T. Jones, Esq., The Cedars, Staten Island.

THE universal estimation in which this delightful flower is held, by the lovers of the floral world, induces me to offer, for insertion in your Magazine, the following remarks on what I, with every submission to superior judgment, conceive to be a method meriting adoption. An impression is entertained by many, that the dahlia is a native of a very hot country; but such is decidedly erroneous, for Mexico, in North America, from whence it was imported, although situated between the tropics, possesses the properties of a temperate climate, highly fertile, and yielding some of the rarest productions of nature. It follows, then, that the United States is somewhat more assimilated to the native clime of the dahlia than is generally imagined; and, from the growing ardor and skill displayed in its cultivation, it has an undoubted right to claim the palm of excellence in the culture of this autumnal emperor of the floral world.

GENERAL REMARKS.

Those who propagate for sale generally excite their plants to growth, the last week in February or first in March, by which means their stock is ready for market by the first of May; but as this season is admittedly too early to risk the planting of valuable dahlias, it is, therefore, unnecessary for those who cultivate for their own amusement, or to supply the garden of their employer, to excite their roots so early as above mentioned, because the earlier the roots are put into excitement, the greater the amount of attention and skill required to guard against the effects of inclement weather. I therefore advise the young dahlia fancier not to form his hot-bed before the first of April, and then to make it of hot stable manure, somewhat larger each way than the size of the frame intended to cover it. After the bed is made, allow it to remain about a week to ferment, that the rank, strong heat may subside.

PROPAGATION BY CUTTINGS.

The bed being prepared and the frame placed on it, let it be covered, to the depth of three inches, with fine, sifted,

sandy soil: the roots should then be put in, and the tubers covered with similar materials, being careful that the crown of the root remains uncovered. The lights may then be put on; but, should great heat arise in the bed, let them be tilted a little at back to allow any rank steam to escape freely. This may be allowed day and night, if found really necessary; but cautiously protecting the roots, by covering, every night, with matting, sufficiently secured to prevent any danger of their being carried off by high winds; of course, the ventilation of the frame must be proportionate to the degree of heat and steam emitted by the bed. This precaution is particularly necessary when the roots begin to push shoots, for, if not attended to at this time, they will sustain much injury, if not be wholly destroyed.

The bed may be now occasionally, but moderately, watered, the water being in a tepid state, avoiding, as much as possible, wetting the growing shoots. Admit air regularly in the day, by partly or wholly removing the lights, but ever careful in replacing them with the mat-covering before the evening turns cold, for one frost would annihilate every shoot, and thereby render a nullity all the attentions previously bestowed. As soon as the shoots are about three inches in length, they may be detached by means of a sharp knife, cutting the shoot immediately under the joints next the crown of the root: in doing this, caution is necessary not to injure any minute buds which may be connected with the base of the cutting. Insert these cuttings singly into thumb-pots, filled with rich, mellow, sandy soil, and plunge the pots up to the rim in a pretty lively heat, where, if kept shaded from the sun and covered at night, they will readily strike root; and, if the bed be much reduced in strength, apply linings or outer coatings of hot manure to the frame, as observation may suggest, or necessity require. When thoroughly established, they may be gradually removed to a cold frame, placing the pots on a layer of lime siftings, to prevent the access of worms; from whence they may be removed to the open air as prudence may dictate. Should they become pot-bound, that is, the pots filled with matted roots, let them be shifted into pots a size larger.

PROPAGATION BY DIVIDING THE ROOTS.

Instead, however, of cutting off the shoots as described above, if the propagator requires only a limited supply of plants, or not possessing sufficient confidence to perform the work, he may allow them to remain until the shoots are somewhat more advanced in growth, when he can remove the root from the bed, and, with a sharp knife, divide it into as many pieces as the shoots will admit of; but, before performing this, it will be necessary to examine the lower part of the roots, because it sometimes happens that shoots start from the under side, and grow upwards between the tubers, in which case, while we are endeavoring to preserve one shoot, we destroy another: however, the best way to guard against this, is to cut no more with the shoot than appears to be connected with it. The shoots thus divided should be potted off separately, in pots proportioned to their size, using rich mellow soil, rather sandy than otherwise, for the purpose, when the pots may be plunged half-way up in a gentle hotbed. The more gentle and moderate the heat of the bed for this system of propagation, the better; and an additional supply of air, during the day, will be required for plants thus treated, they being stronger and growing much quicker than mere cuttings, which have to generate entire roots. As soon as the plants thus treated appear to be established, and begin to grow, they should be removed from the hotbed and placed in a cool frame, exposing them to the air during the day by wholly removing the lights, but replacing them again in the evening.

There are doubtless many whose occupations would restrict their attentions to a hotbed, and, for that reason, will not provide one; in which case, the roots may be placed in a warm south border, in the beginning of May, and covered about two inches with fine sandy soil, where, if kept moderately moist, and covered at night with hand-glasses, or mats thrown over hoops, many will succeed; and when the shoots appear over ground, and are about four or five inches in length, the roots may be taken up, divided and potted as above, and, when well established, planted in their places of destination. I can give one satisfactory assurance that plants, raised from divisions of the root, will make vigorous and pro-

lific blooming plants, and are the more certain to calculate on as capable of propagating from the following spring, which is not always the case with those raised from cuttings, as first described, notwithstanding the root may be perfectly sound, for every generative particle connected with the shoot is unquestionably preserved. I need not remark further on these occasional failures, than that they are generally understood to be occasioned by detaching the young shoots unskilfully, without the incipient or minor eyes or buds connected with the base of it. I, this season, propagated my whole stock by this mode, (root divisions,) and they produced fine, luxuriant plants and flowers, which gained me many marks of distinction from those who came to view Mr. Jones's place.

PLANTING OUT THE ROOTS.

I may here mention, that, on the planting and subsequent treatment, depends much of the success and beauty of the forthcoming bloom. The first week in June I prefer to any other for planting out, as, from this time to the middle of September, the thermometer ranges pretty regular; but, before the first of June, I have some doubt as to the safety of my plants.

PREPARATION OF THE SOIL.

The soil, intended for the reception of the plants, should be laid up in ridges during the winter and spring, consisting of good sandy loam, which, at the time of digging up, should be liberally supplied with old hotbed manure, also well exposed to the previous winter; but, should the loam partake, or incline, to a heavy, saponaceous quality, a liberal quantity of river sand should be intermixed with it. But while I advocate the use of well-neutralized manure, I, at the same time, wish to be understood, that this material is not to be used indiscriminately, but in proportion to the quality or nature of the soil with which it is to be mixed, otherwise it will be found to produce a repletion of growth, by no means desirable.

SOIL AND TREATMENT OF FANCY DAHLIAS.

The variegated varieties should be grown in sandy loam or peat, nearly or wholly destitute of manure, or they will be

liable to run too much, and exhibit self-colored flowers; and, in the event of such appearing, they should be taken off the plant as soon as they open.

I would also notice that the plants, on being turned out of the pots, should not be planted too near the surface. No apprehension need be entertained that the lower portion of the stem of the plant then surrounded by the soil will rot, for vegetation advances rapidly with the dahlia, and the lower portion of the stem gradually attains a strong woody substance.

TAKING UP THE ROOTS.

Let the roots be taken up in November, or as soon as the frost has cut the tops; but dry weather must be chosen, if possible: exposing them to the open air by day, but carefully protecting them from frost at night: when thoroughly dry and free from soil, let them be packed in barrels with sand, or covered with dry soil, sufficient to keep frost from injuring them. This is not written for the benefit of the practical gardener; but to the amateur, or young grower, these remarks may be of service.

Staten Island, Nov. 29, 1847.

ART. VII. *The Means Grass, and its Cultivation.*

By JOHN LEWIS RUSSELL, Prof. Bot. &c. to Mass. Hort. Soc.

On the 268th page of the 12th volume of this Magazine, (or Vol. II. New Series,) will be found a notice of this plant, from a southern correspondent, who, dating from Athens, Ga., May, 1846, says, "I send you a package of seed of what is here known as the 'Means grass,' and is celebrated for its extraordinary productiveness and nutritive qualities, when used for '*soiling*,' especially milch cows. * * * * It grows four or five feet high, as strong as the Gama grass, and may be cut in Carolina four or five times a year," &c. &c.

Being presented with some of the seed from the package referred to, through the courtesy of Mr. C. M. Hovey, I sowed it in September following, and secured two plants from the frost, by preserving them over winter in my study, where, exposed to a sunny window, they made a slow but constant

growth. In the early part of last June, they were turned out into a piece of rather moist, rich land, bordering on a peat meadow, in which situation, after several weeks of stagnation of increase in size, they suddenly took a favorable start, throwing up strong stalks and a moderate supply of leaves, and coming into blossom some time in September. Some of the flower stems are lying before me, and present, as did indeed the entire culms or stalks of the plant, a coarse, hard, and reedy texture, quite unlike any of the grasses which are considered valuable for hay. The heads of flowers were very conspicuous, and attracted universal attention, consisting of verticillate spikes, forming nodding heads (*panicles*) of a rich, shining, yellow hue, which color, as well as a certain satiny lustre, is lost as the seed matures, when the husks have more or less of a dull, purplish tint. The first panicle produced was almost entirely destitute of awns to the florets, and misled me for a while as to its genus, which circumstance, I afterward discovered, was owing to the fact that nearly all the florets were barren or abortive. As more panicles were developed, the awns or beards were abundant, and added much to the beauty of the flowers. Other and lateral panicles were also produced, giving the upper part of the culm a branching appearance.

The two plants, when turned out of the pot, were about a foot high, and had two or three stalks each. At the end of the season, when the frost killed them, they measured, from the ground to the topmost spikes, nearly seven feet, and had thrown up more than thirty stout stems. As I was desirous to secure their greatest possible growth, I did not cut them at all, so no experiments were made on the "soiling" quality of the grass. I should judge, however, from appearances, that it would prove of little value among such a host of better grasses. The leaves were three-bladed, with a stout midrib, resembling those of Barn grass, or Cock's foot panic, (*Echinóchloa crus-galli*,) a troublesome succulent weed about our houses. Each leaf measured about eighteen inches in length from the top of the sheath, and about an inch wide. The bottoms of the culms are furnished with strong and tough roots, similar to those at the lower joints of Indian corn, (*Zea mays*.) These strike deep into the soil, and render it difficult to pull up the plants. Several strong stolones, or creeping, underground

stems, shot out from the main roots to the distance of two feet or more, and were just protruding from the surface as the autumn frosts set in. One of these "*rattoons*" I have secured, for another year's trial. Some seed sown in May, in a dry and rocky soil, grew only about three feet high, and the plants were of a depauperated character, although flower stalks were produced. The first named soil seemed best fitted for its culture.

The Means grass must be regarded as a coarse kind of fodder at best, and of perhaps the same value as the Broom corn, which is a co-species. Unlike that, however, it does not possess half the succulency, nor indeed circumference, of stalk. Its panicles, too, cannot be put to the same economical purposes, however beautiful as a garden ornament. The coming winter will doubtless test its merits for hardiness, as I have left the roots wholly exposed. It seems hardly necessary to introduce tropical or southern grasses, which are naturally coarse or else wiry, as a substitute for the abundant and softer kinds which thrive in a more temperate clime. The same fate would probably await this, as met the famed Gama grass, lauded in the *North Carolina Whig*, as we learn in the first volume of this Magazine, for the year 1835, page 312, where, by the quotation, we learn, that "James B. Marsh, Esq. has lately brought into cultivation this valuable grass," and "he says his horses, cattle, and sheep prefer it to the best of blade fodder; and, having tried red-top, timothy, and clover, he is certain that one acre of Gama will produce more forage than ten of those grasses." After such a recommendation, it were presumable that agriculture would be on the very tiptoe of expectation and impatience for its introduction elsewhere; when, lo! our golden visions were suddenly put to flight by the following *morceau* in the same volume of the Magazine, page 436, from the pen of that sagacious agriculturist, the late Hon. John Lowell, who pronounces it "worthless." "I send you," he says, "specimens of the Gama grass. I have it in all soils. With us, it is worthless as so much florin, which made *two hours' noise* in the world and then expired."

Dr. Darlington, in his *Flora Cestrica*, page 95, tells us, under the head of *Tripsacum dactyloides*, that a "few years ago this grass was much extolled, by some writers in the

West, as an article of fodder for stock. The leaves and young plant may probably answer very well, *where better cannot be had* ; but any one who will examine the coarse culms of the mature plant may soon satisfy himself that it can never supersede the good hay of this region, nor be as valuable in any respects as the common Indian corn fodder,"—a remark which, with all deference to higher authority and trials on the Means grass, I am at present inclined to apply to the *Sorghum halepense*, as the grass is scientifically called.

The beauty of its panicles or flower heads induces me to recommend it to the favorable notice of those who are fond of horticultural pursuits, whether they tend to the cultivation of a gorgeous plant, or to a tuft of grass. As it has never occurred in my experience in gardens before, I presume it will prove a *novelty* with us in the vicinity of Boston ; and Dr. Ward is to be thanked for sending to the North so splendid a foreign production, which, though a native of Syria, has been long known as a garden ornament in Great Britain.

South Hingham, Dec. 2d, 1847.

ART. VIII. *The Japan Lilies ; their History, Cultivation, Propagation, &c.* By the EDITOR.

WE have so often, during the last eight years, since their first introduction into our gardens, spoken of the beauty of the Japan lilies, that it is quite unnecessary that we should enter into a long eulogium of them at this time. The lily, in some of its varieties, has been the theme of the poet, the subject of the painter, and the admired object of every lover of plants from the earliest ages to the present time. The White lily, (*L. candidum*), with its snowy petals and sweet odor,—the Tiger lily, (*L. tigrinum*), with its leopard-like spotting,—the Martagon lily, (*L. martagon*), in its numerous varieties,—and our own Superb lily, (*L. superbum*), are each and all of them among the showiest ornaments of our gardens : many other species possess great beauty ; among which may be named the canadense, philadelphicum, japonicum, eximium, chalcédonicum, &c. ; but the lilies, *par excellence*, are those which form the subject of our article,—the Japan lilies of M. Siebold.

We had intended to have given this article in our last volume, but, as we were desirous to accompany it with an engraving of one of the plants, we were compelled to postpone it till the present time,—our sketch made in the summer of 1846 having been lost. The season is now at hand when the bulbs should receive attention, and we therefore embrace an early opportunity for its appearance, that those who have the plants may know how to manage them so as to produce the best results.

HISTORY.

According to Kämpfer, the Japanese obtain these lilies from Corea; M. Thunberg also confirms this opinion, and M. Siebold asserts that he did not find them anywhere except under garden cultivation. For the introduction of the several varieties into Europe, we are indebted to that indefatigable traveller, Dr. Siebold, who brought them to Holland on his return from Japan, in 1830. They first flowered in the Botanic Garden of Ghent, in 1832, and, in 1836 or 1837, in the nurseries around London, at which time we gave a brief account of them in our Magazine, (IV. p. 63.) They were first introduced into the vicinity of Boston in 1839 or '40, and flowered for the first time in 1841. The *rubrum* is still very rare; but the white and rose-colored varieties are now to be found in many fine collections of plants.

Dr. Siebold brought with him several other species of lilies, some of which have subsequently flowered, but none have proved so splendid as these. A few of the former are the *testaceum*, *Thunbergianum*, *Brownii*, &c. &c.

DESCRIPTIONS OF VARIETIES.

1. *LILIUM SPECIOSUM*, var. *RUBRUM*.—The Crimson Japan Lily.
Synonymes. *L. speciosum* Thunb.; *L. versicolor* Kämpfer; *L. superbum* Thunb. Pl. Japan; *L. Broussartii* Morr.; *L. lancifolium* Hort.

For a long time botanists, as well as cultivators, have been divided in opinion as regards the specific name of the Japan lily. Thunberg called it *speciosum*; but, after its introduction to Europe, it received the name of *lancifolium*, and this has become so generally adopted, especially with regard to

the white and rose-colored varieties, that it is difficult to change it. We have, in most instances, called them the



Fig. 4. Lilium speciosum var. rubrum.

numerous deep crimson points and projections, which sparkle with a chrystal brilliancy. The stem is upright and branched,

the lancifolium ourselves, as we found this the case in nearly every nursery which we visited near London, in the fall of 1844 ; but, in order to give now the correct and established names under which they shall hereafter be known, we have carefully looked up the various authorities, and, just as we commenced this article, the October number of Van Houtte's *Flore des Serres* came to hand, in which the whole matter is fully elucidated ; and we follow the intelligent botanist, M. Chas. Lemaire, who penned the descriptive article accompanying a beautiful colored plate of the *L. speciosum*, var. *rubrum*, the most exquisite of the four varieties.

Flowers very large, drooping, with the segments undulated and reflexed ; of a clear, rich rose-color, covered with

attaining the height of five or six feet ; each branch supporting two or more flowers ; leaves, oval lanceolate, acuminate, 5-nerved. The annexed engraving (*fig. 4,*) represents a specimen of the *L. speciosum*, var. *rubrum*, which has flowered in our collection the last three years, and which is probably one of the largest in the country. We selected it from among several large bulbs in the collection of Mr. Groom, near London, whose stock of the Japan lilies is the most extensive in England. It is a little different in habit from either the *album* or *punctatum* ; being more dwarf, shorter jointed, with smaller foliage, and later in blooming than those varieties.

"Nature," says M. Lemaire, "seems to have been extremely prodigal in her gifts to the Japan lilies ; for she has bestowed upon them a beautiful habit, superb foliage, ample flowers, of the richest color, and the sweetest odor." Indeed, nothing can be more truly exquisite than the *rubrum* ; and we scarcely need repeat,—what we have before stated,—that we consider them the greatest acquisitions which have been made since the introduction of the camellia.

2. *LILIUM SPECIOSUM* var. *ALBUM*. The White Japan Lily.

Syn. *L. lancifolium album*, *L. eximium Hort.*, *L. speciosum albidiflorum Hook.* *L. Broussardii Morr.*

Flowers pure snowy white, covered with white points and projections in the same manner as the *L. var. rubrum*. It attains a greater height than the former, the branches are more extended, and the foliage longer. The bulbs also increase much more readily than the *rubrum*. It is the most robust of the several varieties, strong plants in our collection having produced upwards of *forty* flowers.

3. *LILIUM SPECIOSUM* var. *PUNCTATUM*. The Rose-colored Japan Lily.

Syn. *Lilium lancifolium punctatum Hort.* *L. lancifolium var. roseum Paxt. Mag. of Bot.*

Flowers pale blush, covered with delicate roseate points and projections in the same style as the *rubrum* ; habit similar to the *L. var. album*, growing to the height of seven feet, but not quite so spreading in its branches. It is nearly two weeks earlier in blooming than the *rubrum*.

4. *LILIIUM SPECIOSUM* var. *ROSEUM MARMORATUM*. The Spotted
Rose-colored Japan Lily.

Flowers white, and covered with very distinct ruby spots and points : habit the same as the *rubrum* : growing to the height of five feet. It is much more distinctly spotted than either of the above varieties. It is entirely distinct from *punctatum*. This variety is yet very rare, and in but few collections of plants.

CULTIVATION.

The Japan lilies are of easy cultivation, and, though they have been found to be nearly or quite hardy, yet their adaptation to pot culture will always make them the especial favorites of the conservatory and greenhouse, where, during the months of July and August,—as we have before remarked, (XIII. p. 264,)—they will form the most brilliant ornaments. In order, however, that our directions may be more explicit, and readily understood by every amateur, we have placed them under the various heads of Soil,—Repotting,—and General Treatment.

Soil.—The best soil for these lilies is a mixture of peat, loam, and leaf mould, in about the following proportions :—one third peat, one third leaf mould, or very old and perfectly decayed manure, and one third fibrous hazel loam. If the loam is very stiff, a small quantity of sand may be added, to give freeness to the compost. We have tried them in a soil richer than this, and with more loam, but we have not been so successful in their cultivation.

Repotting.—Supposing the bulbs to have been placed under the stage, or in the cellar, they will begin to grow by the first of February, particularly the *punctatum* : as soon, however, as the shoots are seen pushing through the soil, preparation should be made to repot them. In the first place, have in readiness a good quantity of the proper sized pots, with plenty of good potsherds, of various sizes, for drainage : having selected the pots, place in the drainage, and over this, (which should quite cover the bottom,) throw on some of the coarsest of the compost ; then fill in with the soil to the desired height. The bulbs should then be carefully turned out

of their old pots, and all the loose earth shaken off, being particular, however, not to injure the long fleshy roots which are always coiled round the pot: some of the smallest and least fleshy may be cut away, but the less that is done to them the better, if they are in good condition. All the offsets should also be removed. Now supposing the plant to have been in a 12-inch pot, it may be planted in an 8-inch, which will answer for some time. At this potting, the top of the bulb should be about half an inch below the soil. Place the soil in tolerably firm, with the potting stick, and finish with a very gentle watering, just sufficient to settle the surface. They may be then removed to a cool, half-shady place, where they should remain until the bulbs have made shoots two or three inches long. A thin layer of moss over the drainage will allow of a freer passage of superfluous moisture.

General Treatment.—Water should be very sparingly given until the shoots have grown to the length of a foot, when the plants may have a liberal supply. By this time, also, they should be removed to an airy and light part of the house, which will prevent them from drawing up weakly. No other care will be required, but to give them water, until the first of April, when they will need shifting into the pots in which they are to flower. For good strong bulbs, these should be twelve inches in diameter. At this potting, the same soil should be used as before, but the bulbs should be placed deeper in the pots: if they have done well, numerous roots will be seen issuing from the base of the stem on the surface of the soil: these are the roots which support the flowering stems, and, at this potting, the bulb should be sunk deep enough to cover these roots about two inches. They may then remain until they throw up their flower stems, when they should be neatly staked up, being careful not to injure the bulbs. Repeated syringings should be given to the plants until the flowers are nearly ready to expand, as this greatly invigorates them.

About the middle of June, the flowers will begin to open,—those of *punctatum* first,—and from that time until the end of August, they will be constantly in bloom: during this period, they should be liberally supplied with water, and have a good airy situation: if partially shaded in the middle of the

day, they will keep in flower much longer. After the flowers have all fallen, the seed-vessels should be pinched off, unless it is intended to ripen the seeds, as any great number of them generally weaken the bulbs, by diverting the energies of the plants to their growth instead of strengthening the root. For a week or two, the plants may be watered as usual, after which they should receive it more sparingly, and, in the course of a month, it should be withheld altogether. The pots may then be removed to the open air, and placed in a shady situation, where they may remain until October: the old stems should then be cut off close to the ground, and the pots placed under the stage or in the cellar, till the usual season of repotting arrives.

PROPAGATION.

The Japan lilies, like other species and varieties, are readily increased by offsets from the old bulbs. It is the most common, as well as the safest, mode of propagation. Other plans have been resorted to by nurserymen, desirous of rapidly increasing their stock; but the amateur will find them hazardous, and, in experimenting, will be in danger of losing his best bulbs. We shall, however, detail the principal modes, which are, propagation by Offsets—by Scales—and by Seeds.

Offsets.—These are obtained at the general potting: when the earth is shaken from the roots, several of these may often be taken from the base; other offsets or young bulbs also appear at the bottom of the old stem, above the bulbs, and if the stems are slightly earthed up, a month or two before the blossoms appear, these young bulbs will be much larger. They should be separated very carefully, preserving all the young roots, and should be potted in the same compost recommended for the old roots, with the addition of a little more peat and sand. Plant one of the strong bulbs in a three-inch pot, and three or four of the smaller ones, round the edge, in the same size. The second year, these should be repotted according to their strength, and treated in the same way as the old bulbs. They will generally show one or two blooms the third year, but they will not attain their full size, until the sixth or seventh.

Scales.—These are taken from the outside of an old bulb, and potted in sand, and placed in a gentle heat, under a hand-glass: very carefully treated, they generally form small bulbs; these, the second year, should be potted off, and afterwards treated in the same manner we have recommended for offsets. This mode is only practised by those who have all the facilities of propagation; as, under ordinary management, it would probably end in sacrificing the old roots.

Seeds.—There is no more rapid way of increasing the Japan lilies than by seeds. These are easily obtained if the flowers are properly fertilized, and frequently they mature without its being done artificially. Any time, during winter, the seeds may be sown, placing them in broad, shallow pans, in a compost rather lighter than we have already recommended, and covering them about a quarter of an inch deep. Frequently, the seeds show no outward signs of vegetation the first year; but, upon searching after them, it will be found that they have made small bulbs, from which, the second year, a good shoot will spring up. The first and second years they may remain in the pans, giving them water rather freely while they are growing, but withholding it when the foliage begins to turn yellow. The third year they should be potted off singly in thumb-pots, and afterwards receive the same treatment as offsets. They will occasionally flower the third year, but ordinarily not until the fourth.

NEW VARIETIES BY HYBRIDIZATION.

Scarcely sufficient time has elapsed, since the introduction of these lilies, to have produced any great number of seedlings. But we apprehend that, ere long, a great quantity of new varieties will be raised by hybridization. Whether any improvement will be effected upon the *L. speciosum* var. *rubrum* is somewhat doubtful, but that a race of hardy kinds may be produced, between the garden and the Japan varieties, we do not doubt. We have now several hundred seedlings of various ages, from one to three years old, which have been raised from the *rubrum*, *album*, and *punctatum*, impregnated with *tigrinum*, *chalcedonicum*, and *superbum*: some of them show a very distinct foliage from their parents; and,

from the cross between *rùbrum* and *chalcedónicum*, we look for some marked varieties: if the fiery brilliancy of the latter can be added to the former, some good results may be anticipated. Crossing the Japan lilies with each other cannot lead to any thing very decided; as seedlings raised from *rùbrum*, impregnated with *álbum*, and vice versa, have either resembled the intermediate form of *punctàtum*, or nearly approached the *rùbrum*. Col. Wilder, of Dorchester, has raised several of this character. We would urge upon amateurs the propriety of producing seedlings by fertilization, and ultimately some great results may be attained.

GENERAL REMARKS.

It has been supposed that the Japan lilies would prove perfectly hardy in our climate, and thus become great acquisitions to our gardens. Experiments have been tried, and they have been found to succeed tolerably well. Their hardiness would certainly be a valuable quality; but, so far as we have seen them from the open air, they have been poor representatives of those under the treatment we have detailed. The truth is, the texture of the flowers, and their exquisite tints, are altogether too delicate to be exposed to our scorching suns, high winds, and drenching rains: and although they may display their flowers under the ordinary treatment of the white and tiger lilies, yet the short duration of their beauty will afford no satisfaction to the admiring amateur; on the contrary, the facility with which they are cultivated, the long time they remain in perfection, and their adaptation as ornaments either of the conservatory, greenhouse, balcony, or verandah, will ever place them first in the rank of in-door plants.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Foreign Notices.*

TURKEY.

Gardening on the Bosphorus.—The following notes on the state of Horticulture around Constantinople were not written for publication; but as

they possess much interest, we take the liberty to copy them, knowing that they will be read with much gratification. Messrs. Hovey and Co. have forwarded the writer some of the finest kinds of American pears, apples, and peaches; and we have no doubt but their introduction into the sultan's garden will be the means of extending their cultivation into all the finer gardens on the Bosphorus,—and the Baldwin and Northern Spy apple be better known than even in the gardens of some of the highly civilized portions of Europe.—*Ed.*

“The sultan, a most amiable and generous person, has an extensive garden attached to his winter palace on the European side of the Bosphorus, as yet but new; and I wish to furnish it with a few of our American trees, among which I have thought of a few sugar-maples,—such as we make sugar from in Ohio,—hickory (shell-bark, &c.), and our black walnut (fir),—there is abundance of what is called the white or English walnut here (*regia*),—oak, magnolia (that flowers),—I have seen the latter in Ohio, where it is much colder than here,—beech, tulip-tree, sassafras, catalpa, cranberry, &c. All of these, I believe, are wholly unknown here. The poplar, elm, persimmon, horse-chestnut, scrub-green oak, linden, and the usual fruit trees, (none of them very good,) are abundant, and, in the woods, the *arbutus* is common, and very pretty.

“I may mention, that the climate here is very mild. There are snows during our winter, which commences in January and ends in April; but they last but a day or so, and soon melt away. The atmosphere during the winter and spring is very damp and chilly, and fires are indispensable. We have no good apples about here, near; but the cherries, plums, (large as hen's eggs, red, blue, and white,) and pears are good; so are the peaches; but neither of the two last are to be compared to ours of the United States. Of course, the grapes are excellent,—generally of a large white kind called *Tehauch* grapes; the large blue are also good, but too fleshy. Figs are also good, but not so abundant as in Smyrna. Almonds grow well here, English walnuts, filberts, chestnuts,—large but not very sweet,—and large strawberries in abundance. Medlars and persimmons grow here; the latter are from Trebizonde on the Black Sea, and *here* bear the name of Trebizonde dates. Among the garden ornamental trees, I may mention the acacia, of two kinds,—the one bearing small yellow flowers of a strong rich odor, and the other producing a light-red flower, like a floss of silk, and is called by the Turks '*Gul Ibrashim*,' or, the '*Rose-silk tassel tree*.' The Turks have much taste for flowers, and their summer-houses are much ornamented about the steps with choice flowers in pots, and their gardens look beautiful to the passer-by. My office of interpreter to the legation leads me frequently to these summer retreats, and I cannot tell you how much I admire the taste shown for natural embellishments by those whom the world regards as scarcely half civilized.

“I was last autumn at Erzeroom, not far from the Persian frontier, where I procured a few flower-seeds, among which is the '*Morina Orientalis*,' peculiar to that place, and named, by the French traveller Tournefort, after

a friend in Paris. I have sent some of the seeds to the American Oriental Society, of your city, of which I am a member, for the Horticultural Society. I have some fruit kernels, and other seeds, which I will send you from Smyrna, with a few of this same Morina, and I beg you to try it. The climate of Erzerroom is cold, and the soil, where it grows, poor and stony; and on that side near its base, there is a beautiful crimson flower, the stalk about two feet and a half high. It is an annual. I will try and procure for you some cherry seeds from Cerassum, the country on the shores of the Black Sea, from which place cherries are said to have their origin. I do not hope to furnish you with any thing *better* than you already possess, but to give you some *varieties*.—Yours, J. P. B, *Legation of the United States of America, Constantinople, Oct. 8, 1847.*"

ART. II. Domestic Notices.

The November of 1847.—This month will long be remembered for its unusual mildness. For the most part, the weather has been delicious, so unlike to usual November skies, that we seem, thus far, to have had scarcely any of that dreadful month, when cold and dull-blue clouds and desolating winds mostly obtain. October and November seem to have changed their relations to autumn during the present fall; and, though I have no means of ascertaining the mean temperature, yet, from impression, I should give the preference to the latter in regard to genial atmosphere. From some rude notes at hand, I perceive that *Cólchicum autumnale* was in full flower in the garden on the 20th September, which may be considered the last decidedly autumn flower, if we except *Sedum Sieböldii*, whose buds are forming from the latter part of July, and is variable in its blooming, and therefore not so good a test of autumnal inflorescence. The cool and easterly weather had been so unfavorable to the Isabella grape, that a fine healthy vine on the south side of the house, in an excellent situation, had not nearly matured its fruit on the 16th October, and was decidedly injured by a frost of the preceding night. The same vine produced very finely ripened bunches when gathered on the 13th October of the preceding year. As early as the sixteenth of September, frosts were perceptible in several places, and, on the sixteenth of October, they were so severe as to kill dahlias black, and to produce ice. October finished itself pretty much after the same style, and an apparent cessation to all further vegetation was the result. November dissipated these views, and its first week reminded us of Indian Summer. From the 21st to 29th, the weather was similar, and the mildness of the season, aided by refreshing rains, awakened Flora from her sleep. While walking in the woods of Duxbury, on a pleasant afternoon of November seventeenth, several fully expanded flowers of *Epigæa repens* occurred; and, in sunny spots, the buds seemed ready to burst forth into premature bloom, the delicate rosy tints of the corols distinctly visible, indeed as forward as they are usually in the middle of April. In the gardens, on the twenty-fifth, pansies, (*Viola tricolor*), were not un-

usual, while gilliflowers, *Verbena Aubletia*, the red trumpet honeysuckle, (*Caprifolium sempervirens*.) exhibited some scattering blossoms. *Phlox setacea*, var. *nivalis*, was full of buds in a state of forwardness ; while chickweed and *Poa annua* were in perfect flower in the neglected borders and paths. On the same day, I found also *Málva rotundifolia* full of flowers, *Erysimum vulgare*, *Zepidium virginicum*, the common clover, *Trifolium pratense*, with several heads of perfect blossoms. Some lingering blossoms were to be seen on cabbages set out for seed from the tops of side sprouts : on the twenty-sixth, the dandelion (*Leontodon Taraxacum*.) and a full-grown flower of whiteweed, (*Leucanthemum vulgare*.) and, on November twenty-seventh, *Apárgia autumnalis*, and *Trifolium repens*, or white clover. The twenty-ninth and thirtieth were very cold, and winter seemed to have set in, in earnest ; but, on the second of December, the weather moderated, and, on this day, the rain from an easterly point of the compass has succeeded a drenching storm from the south-west of last night, and reminds us of those early autumnal rainy days, which are not unusual at that season of the year. A slight sprinkling of snow fell on Sunday evening, November 29th, the only indication that winter has really come.—*J. L. R., South Hingham, December 3d, 1847.*

ART. III. Massachusetts Horticultural Society.

When our last number went to press, want of room compelled us to omit the reports of the doings of the several meetings held in November. We now give them in order.

November 13th.—An adjourned meeting of the Society was held to-day—the President in the chair.

The following persons were elected members :—Edward N. Perkins, Brookline ; G. R. Minot, S. M. Weld, Roxbury ; Dr. Daniel Chaplin, Cambridgeport ; Alexander Pope, and Benjamin Hemmenway, Dorchester ; James Hill, Somerville ; N. Hooper, Horace Gray, and Edward King, Boston.

Adjourned for three weeks to December 4th.

December 4th.—An adjourned meeting of the Society was held to-day—the President in the chair.

No business of importance came before the meeting, and it was adjourned for three weeks to December 25th.

[An error occurred in the list of officers for 1848. The name of C. M. Hovey was omitted as *Chairman* of the Library Committee.]

December 11th.—*Exhibited.*—*FRUIT* : From J. F. Allen, Winter Nelis, Passe Colmar, Chaumontel, (fine,) Easter Beurré, (fine,) and Lewis pears, White Frontignan and Black Hamburgh grapes. From M. P. Wilder, Beurré d'Arenberg, and Glout Morceau pears, both of which sustain their high character. From Jabez Wetherbee, apples, for a name. From H. Vandine, New Long Rose Water, and Passe Colmar pears. From Josiah Lovett, Glout Morceau, Le Curé, and Winter Nelis pears, (fine,) also Minia-

ter apples. From George C. Jenks, apples for a name, (fine.) From E. S. Rand, apples for a name. From Robert T. Paine, Spitzenburg apples.

December 18th.—Exhibited.—FRUIT: From Otis Johnson, of Lynn, very fine specimens (flavor delicious) of the Easter Beurré pear. From George Johnson, of Lynn, specimens of the Lewis pear. These specimens were excellent, and sustain the quality of this fine native pear. From E. Newbury, Coggswell Pearmain apples, which lack flavor. From John Owen, apple for a name, handsome, but second rate: also baking pears. From S. W. Cole, apples from western New York.

ART. IV. *Answers to Correspondents.*

DESTRUCTION OF THE RED SPIDER AND MEALY-BUG.—*Rusticus*.—If you can inform me how to get rid of two pests of the greenhouse, you will be entitled to my everlasting gratitude. These are the *red spider*, and the *white mealy-bug*. They almost make me weary of my life; but, so far from being weary of theirs, they cling to it with a tenacity which tobacco, sulphur, and hot water, all fail to overcome. I kill my plants with these remedies, but the bugs live on.

I would like to ask also whether all greenhouse plants should be cut down after flowering: and, if not, what classes of them require it. By answering these questions, you will oblige.

It would require more space than we have room to spare to answer the last question which *Rusticus* has proposed. In regard to the Red Spider, no insect is more easily destroyed, in the greenhouse or hothouse, than this: fumigating with sulphur will as effectually rid the plants of these pests, as fumigating with tobacco will the Green Fly. Care should be taken, however, that the sulphur does not *burn*, as the leaves of the plants would then be likely to suffer. If it is carefully strewed on the flue, not too near the furnace, for three nights in succession, so that the atmosphere may be somewhat disagreeable, every spider will be destroyed. This may be known by examining the leaves, when, if the insects are dead, they will be quite black.

The Mealy-bug is very difficult to extirpate; indeed, we do not know a complete remedy: one of our practical gardeners has assured us, that if the house is heated to the temperature of 130 degrees, and then syringed freely, to create a moist atmosphere, all the bugs will be destroyed. We have not tried this plan, but intend to do so. Our mode now is, to wash the plants, *very* carefully, using a small brush, with whale oil soap, and water, at the temperature of 150 degrees. We have found that this answers very well, and prevents their increase.

All greenhouse plants do not require to be cut down after flowering: as a general rule, however, all the soft-wooded plants, such as pelargoniums, euphorbias, mahernias, verbenas, petunias, heliotropes, salvias, Erythrina, &c., should be headed in after they have done blooming: but heaths, coræas, azaleas, rhododendrons, acacias, camellias, and similar hard-wooded

plants, only require to have their branches thinned out, or headed in a little to bring them to a good shape. Others which are also of a ligneous habit, require severe heading in, though not so much as the soft-wooded ones; of this class, are roses, fuchsias, abutilons, &c. Long experience only will enable the cultivator to ascertain what peculiar treatment some kinds of plants require.

HORTICULTURAL MEMORANDA

FOR JANUARY.

FRUIT DEPARTMENT.

Grape Vines, at this season of the year, will require little or no attention if the pruning has already been done. If, however, in consequence of an accumulation of work, time has not yet been found to complete this work, it should be taken hold of at once, in order that the wounds may get well healed over before the vines break in March. The pruning finished, all the old loose bark should be peeled off carefully, so as not to injure the buds, and the whole may then have a thin coat of the composition which we have frequently recommended, viz., sulphur, oil soap, and a small quantity of clay. This will destroy all insects which may be lurking in the crevices of the bark. The whole of the shoots should then be laid carefully along the front of the house, and made fast, where they are to remain until they begin to break their eyes. Grape vines in pots may now be brought into the greenhouse, and placed in a good situation, where they will gradually come forward, and produce an early crop.

Fig Trees may be brought into the greenhouse this month.

Peach Trees in pots may be also brought into the greenhouse the latter part of the month.

Scions of fruit trees may be cut now, and placed in a proper situation for use in spring.

Root-grafting may be done now, in the manner which has frequently been recommended in our pages, and more particularly in our last volume, p. 312.

FLOWER DEPARTMENT.

Camellias will now need much attention. Many of the sorts will be in full bloom, and to have the plants in the best condition, they should be often looked over. Every faded bloom should be picked off, and if more than two buds appear on the end of any branch, one should also be picked off. If the leaves have not been washed, now will be a fine time to do it, as there is little else at this season to occupy attention. No ambitious gardener would ever let his plants go over a year without a good washing. Staking up the plants should also be looked to, as a crooked camellia is a sorry object. No plant is more tractable under judicious treatment. An occasional watering with weak guano will be beneficial to the plants.

Pelargoniums will soon require more care; all the younger plants, for a spring stock, will need immediate repotting; but the older ones will not require it till the latter part of the month. Training out the shoots should

now be attended to, especially if very handsome plants for exhibition are wanted. The latter part of this month, they should be shifted into larger pots; those in six-inch into eight-inch, and those in eight-inch into eleven-inch. Fumigate often to destroy the green fly, and syringe occasionally to give the plants a green and fresh appearance. Seeds may be sown now.

Japan Lilies will now need attention. Repotting should commence as soon as the roots begin to push, which is generally about the middle of the month. Our article on a previous page will give all the information in detail for the treatment of this exquisite class of plants. Young seedlings of last year may be potted off singly into small pots, or three may be put into a larger one. Seeds of 1847 may be sown now.

Cactuses will now have formed many of their buds, and may be watered a little more freely.

Achimenes should now be brought on for a succession; a small pan will hold a large quantity of bulbs until they have sufficiently grown to be potted off.

Gloxinias should be now started into growth, by placing them in the warmest part of the house.

Calceolarias will need another potting the latter part of the month.

Azaleas will soon begin to bloom, when they should have more water.

Petunias should now be repotted, and fine sorts may now be propagated from cuttings.

Pansy seed for early blooming should be planted this month.

Dahlias of such sorts as are wanted for blooming very early, or for increasing the stock, should be planted this month.

Fuchsias should be attended to now, if fine specimens are wanted for blooming in May or June. Shake off the old soil, and pot in fresh tree earth.

Oxalis Hirta, and *Bowiei*, done blooming, may be placed away on a dry shelf, and only occasionally watered.

Sparaxis will now be blooming, and will need more water.

Roses will soon begin to bloom; top-dress the plants if they need it, and tie up the branches gracefully; give guano occasionally, and strong suckers will be thrown up which will give a most abundant bloom of fine large flowers. Fumigate often, and syringe freely in good weather.

Neapolitan or *Perpetual Violets*, should have a cool, half-shady place, and be liberally watered.

Heaths will now be making a healthy growth, and will require to be carefully and liberally watered; occasionally giving them a good watering overhead with a fine syringe. Top-dress all such as need it. Now is the time to propagate from cuttings.

Greenhouse plants of all kinds should now be propagated, as this is the most favorable season. Scarlet geraniums, salvias, heliotropes, verbenas, and all such plants as are wanted for bedding out, should now be propagated in quantities. Keep the houses neat and clean, and get things in readiness for spring work.

THE MAGAZINE OF HORTICULTURE.

FEBRUARY, 1848.

ORIGINAL COMMUNICATIONS.

ART I. *On the Formation of Vine Borders.* By the EDITOR.

THE cultivation of the grape vine under glass is now attracting much attention; and many new vineries have been erected in various parts of the country the last two years. The formation of the border, certainly one of the most important objects connected with the successful management and future welfare of the vines, is, therefore, considered as deserving of every attention. Much has been written upon this subject in each volume of our Magazine, and we have endeavored to present our readers with all the information which could be of any value to the amateur, or practical cultivator. In our article in our last volume, (XIII. p. 293,) upon the growth of the grape vine in the greenhouse or conservatory, we gave a few hints upon the preparation of vine borders, and remarked "that a *fine crop* of grapes could be obtained without all the *quackery* so often recommended in their formation, such as a bed of oyster shells, or boiled bones, dead horses, cattle, dogs, slaughter-house manure, blood, soot, &c."

Some of our practical friends, who have had some experience in the culture of the grape, have been somewhat surprised to find we were not a firm believer in the great efficacy of the very richest ingredients, such as dead animals, for the formation of the border, and some have been almost disposed to doubt whether our own success was not effected by some such aid, contrary to our statement. To the former, we need only remark, that we are more and more convinced, that the employment of the carcasses of animals is of no benefit whatever, but rather an injury in the end; and, to the latter, we

shall merely state that, whatever practice we recommend, we invariably adopt, until experience assures us that it is founded in error.

The subject of the preparation of vine borders has recently attracted considerable attention in England, and various communications have appeared, in some of the gardening periodicals, in relation to the practice of using the carcasses of dead animals. This discussion has taken place in consequence of the publication of a small, but excellent little work, of only eighty or ninety pages, upon the culture of the grape, by Mr. Roberts, a very successful cultivator. Probably, few copies of the volume have ever found their way here, in consequence of the high price at which it was published. We, however, received a copy when it first appeared, and read it with much interest, and came to the same conclusion as Dr. Lindley, whose article we are about to notice, that it was one of the most thorough, practical, and common-sense treatises which we had ever read, and, saving its recommendation of the "pabulum" of dead animals, to produce the "nectar of Bacchus," was just what every cultivator of the grape was in need of. We had intended to have prepared a Review of it, but other matters pressed upon us, and it was, for the time, forgotten.

The preparation of our article in our last volume brought the subject up anew, and it was in reference to Mr. Roberts's views that we made the remark before quoted. Subsequently to the publication of our paper, and unknown to us at the time we wrote, appeared Mr. Allen's pamphlet on the culture of the grape, in which he advises the use of carcasses of dead animals, if they can be had, to such an extent as to cover the bottom of the border. In our Review of this work, (XIII. p. 409,) we incidentally stated our objection to this practice, believing it to be of no use, but rather injurious to the future health of the vines.

Since that time, the discussion of this question has principally taken place, and, to show that our views are the same as those entertained by experienced cultivators, as well as scientific writers, abroad, we have quoted the following article from the *Gardeners' Chronicle* for December last, to which we ask especial attention:—

“ One of the best modern writers on the Vine, is Mr. Roberts now gardener to the Duke of Cleveland, at Raby. His *Treatise on Vine Culture* contains more really good advice, and sensible suggestions as to the way in which this plant should be managed in Vineries, than all the English books of routine, which had been previously published, put together. His success as a grape grower, while gardener to Mr. Matthew Wilson, at Eshton Hall, near Skipton, was a brilliant example of the general soundness of his principles. A large silver medal, which was awarded by the Horticultural Society, to some bunches of grapes, exhibited Sept. 7, 1841, sufficiently attested the advantage of his practice; nor were they a picked sample, but a fair gathering from the Vineries under his care, as we happen to know on the very best authority.

“ It is therefore with no ordinary reluctance that we venture to question a part of the system which Mr. Roberts advocates. We allude to the employment of carrion in his Vine borders. In a letter which we published last week, he states his conviction that this sort of manure is of the first degree of importance. After mentioning that in his new Vine borders, not one horse carcass, nor a portion of one, is buried, he expresses his regret, that at the time he made them, it was not in his power to avail himself of ‘that pabulum to produce the nectar of Bacchus.’ (!) ‘But,’ he adds, ‘if I was not able to add carrion, except in a very limited degree, at the time my borders were made, I may mention that I fell in with a goodly lot last winter, part of which has been added as a top-dressing this autumn, and I intend in future to apply it to that purpose. I am so cautious, that the least particle should not be wasted, that I hoard it up as a miser would his gold.’

“ This is perfectly consistent with the directions which Mr. Roberts has given in his *Treatise*.

“ ‘I would recommend,’ he there says, ‘the autumn, if the weather be dry, to prepare to fill in your border. If it extends the length of one, two, or more houses, a month previous to filling your border, provide a quantity of carrion—cattle dying by accident, disease, &c., which, I am sorry to say, has, of late years, been too common an occurrence. If you have collected it some time beforehand, have it cut into small pieces and laid up in soil, till the time of using. *It emits a*

very nauseous effluvia ; but this must be borne, for this is the pabulum to produce the nectar of Bacchus. When all is ready, and the weather favorable, proceed at one end of your border, wheeling in and mixing the materials in proportion as they stand to each other in my previous directions, *on no account breaking the materials in mixing*, but turn them in as rough as possible, *adding one good-sized horse or cow carcass to every 10 or 12 square yards* ; using caution, and not bringing it to the surface of the border within one foot, as its assistance is not wanted the first year.'

"It cannot be denied that this is a process which must not be called inviting. Has it any disadvantages? Has it any advantages? These are both very important branches of inquiry. It may be alleged that it can have no disadvantages, because the magnificent grapes above referred to, were obtained by it. But we are ignorant of the history of those Vines since 1841, and this point it would be desirable to have elucidated. In the next place, it appears to us that the introduction into Vine borders of pasty masses of matter, such as result from the use of carrion, is at variance with the first principles of Vine cultivation, the truth of which was known even to the Romans.

*A free LOOSE earth is what the Vines demand,
Where wind and frost have help'd the lab'rer's hand,
And sturdy peasants deep have stirred the land.*

"This was the maxim of Virgil, and all theory and experience prove its value. Then there are the gaseous results of decomposition, whose putrid odors render Vine borders, constructed on Mr. Roberts' plan, so intolerably disgusting. Can any one seriously believe that such an agency is desirable? That it is even suitable? Certainly we are not among the number. It is perfectly well known that azotized manures in a state of high concentration, are injurious or destructive to vegetable life; as is proved sufficiently by the effect of certain animal matter, when thrown upon grass land; or as we have just now evidence of before our eyes, in the form of a large Oak-tree which was almost killed a few years ago, in consequence of the contents of an old cess-pool having been dug into the ground about its roots. It is only when diluted that

such manures acquire the high value which belongs to them. But it is not alone by their direct action, that they affect plants injuriously; the putrid gases which they give out, are destructive to the young stems and foliage of plants, in proportion to their strength; such gases are, up to a certain point, absolute poisons, although below that point they are nutritious. It is not very long since, that plants, in a small greenhouse, were almost destroyed in consequence of a dead hedgehog having been allowed to putrify in it; and it appears from Mr. Roberts' statement, that some of his young Vines, about thirty, are dead at the ends; those thirty being 'entirely confined to the *roof Vines* planted outside,' precisely those which the light gaseous products of the rotten carrion, used in neighboring borders, though not in their own, would be most likely to affect. Mr. Roberts, however, is not inclined to refer the bad condition of his Vines to any such cause; but he hints at the glass being possibly in fault. He also refers to Mr. Jones Nash's admirable Vine borders at Bishop's Stortford, which 'are stated to be gorged with manure, and fleshings of skinners and tanners,' and compares them, as we understand him, with his own. But, in truth, there is no analogy. Not a particle of carrion was employed there. Such animal matters as skin, hair, and trimmings of hides, decompose very slowly, and are not carrion any more than bones are. It is the animal matter which rapidly becomes putrid, and passes off in clouds of poisonous gas, that renders carrion, properly so called, objectionable.

"The Vine dressers of France object to manure altogether. Virgil, to be sure, recommends it in some lines, which should be committed to memory by every young gardener :

Next : when you layers in your Vineyard make,
Mix some rich dung, and shells and pebbles break,
Spread the good soil with lib'ral hand around,
And trench them deeply in the lighten'd ground ;
Superfluous moisture thus glides through the earth,
And healthy vapors aid the tender birth.

"No doubt these are wise maxims. No modern discovery is at variance with them; on the contrary, they are confirmed by the experience of the most intelligent cultivators. The whole aim of the poet, is to inculcate the necessity of keeping

the soil loose. Dung may be used, he says, but then you are to mix it with *shells* and broken pebbles, the object of which is to secure the constant openness of the soil.

“On the other hand, Chaptal, the best French writer on the Vine, discourages the use of manure.

“‘The same reasons,’ he says, ‘may be used against the system of the Vine-growers of the north, who think it advantageous to manure their Vines. By this means, indeed, they obtain larger crops, and more wine, but it is of bad quality, it will not keep; and its smell *often reminds one, when drank, of the disgusting substances which produced it.* Manure communicates to the Vine too much nourishment. The nutritious juice, reduced to gas, and received by the mouths of the capillary roots, and by the air-vessels of the leaves, penetrates and circulates in the sap-vessels, forms the wood of the plant, and furnishes the substance out of which the shoots, leaves, flowers, and fruit are developed; the more abundant the nutritive matter, the more the diameter of the vessels distends, the more rapid is the circulation of the sap, because the channels through which it passes have more capacity. This causes the sap to circulate in a less state of elaboration, the result of which must be, that the wine is flat, insipid, and destitute of all the principles of alcohol. *Nevertheless, the abundant crop thus obtained, and the brilliant vegetation, are, after all, in some measure deceptive, FOR THEY CAN BE BUT TRANSITORY.* In Vineyards where manuring is practised, they only manure once in ten years. It is not to be doubted, that the effect is very remarkable the first three or four years after the manuring of the Vines, *but, in the succeeding years, the plants begin to languish;* no longer finding that abundance of nourishment to which they have been accustomed, they suffer in consequence, and often fall victims to the want of it. Thus a part of the plants are lost, either by too much or too little nourishment. But Vines can receive, and it is often advantageous to give them, such manure as will make good the poverty of the soil, its exhaustion, or what is required otherwise for this sort of cultivation. No manure suits Vines better than what is properly called vegetable earth, obtained by the decomposition of plants Mosses, leaves, and turf, mixed together, thrown up in great heaps, and left for about two

years to ferment, make the very best manure of this sort.'— (*Traité sur la Culture de la Vigne*, i., 333.)

"We will not say that these maxims are exactly applicable to English Vine growing, we seeking fine bunches of grapes, the French requiring juice of fine quality; and we are, therefore, ready to concede the value of manure of a proper description. Nevertheless, although we fully grant this, we are not the less of opinion that the effect of manure on Vines is overrated, and we will take the liberty to quote Mr. Roberts' own Eshton Grapes in our support. He says, 'it may be in your recollection, and in that of many of your readers, that a collection of grapes was submitted by me, in Sept. 1841, to the Horticultural Society, which was the produce of young Vines. The borders in which they grew contained carrion, &c., as detailed in my Treatise, and *until I find the specimens then sent superseded*, I will still carry out and recommend the use of carrion when it can be had.' We find that the weight of grapes exhibited on this occasion, was as follows, one bunch in each case.

Cannon Hall Muscat	-	-	2 lbs. 3 oz.
White Nice	-	-	7 12
Black Hamburgh	-	-	2 5
Black Prince	-	-	2 15
Black Damascus	-	-	1 11
Black Morocco	-	-	2 7

And the bunches were beautiful. But we have also before us the following memorandum, to be found in the 'Journal of the Horticultural Society,' vol. ii., p. 303.

"On the 21st of August, 1847, the Vice-Secretary received from Mr. Abel Lewis Gower, four bunches of grapes; one a Muscat of Alexandria, weighing 2 lbs. 9 oz., and the others Black Hamburgs, weighing respectively 2 lbs. 9 oz., 3½ lbs., and 5 lbs. The Black Grapes were rather deficient in color, but of very large size, and excellent quality.'

"Now it will be observed, that the smallest of these bunches weighed more than Mr. Roberts' Black Hamburgh, and the largest *more than twice as much!* And how did Mr. Hutchison, the gardener at Castle Malgwyn, obtain them? By carrion or any such violent and disgusting materials? Not at all. He states that 'the compost used in the formation of

the border, was hazelly loam, with its turf three parts, and one part brick, lime rubbish, and broken stones, with a little rich old dung, the turf well rotted and the whole well incorporated; the borders are forked up and watered with liquid manure once a year.'

"Mr. Roberts will thus see that his fine Eshton grapes are 'superseded;' are, in fact, beaten by specimens more than twice as good, and that by the use of simple, inoffensive means, which, moreover, do not render a garden more pestilent than a London churchyard, and so dangerous to health, that it would be infallibly indicted, if it existed within the reach of any sanitary regulations. Should Mr. Roberts remain unconvinced by these arguments, we would at least endeavor to persuade him to defer the use of carrion till the coming cholera shall have quitted us."

We, of course, would not attempt to put our grapes in comparison with the famous ones of Mr. Roberts, whose borders are *twenty-four feet* wide, and *three and a half feet* deep, and whose houses are *exclusively* devoted to the vine. But to show to what perfection the culture of the grape may be carried in the greenhouse or conservatory, where there is a collection of valuable greenhouse plants, we shall give the weight of a few clusters which were produced on our vines last year, then only five years old. The border, it will be recollected, is only *fourteen feet* wide, and *two and a half* deep, made of good loam and stable manure, with the addition of a few ground bones, and top-dressed with forty or fifty pounds of guano.

Black Hamburgh, 3 lbs. 8 oz., 3 lbs. 4 oz., and 2 lbs. 12 oz. respectively, from one vine. Wilmot's Black Hamburgh, 2 lbs. 8 oz., and 2 lbs. 4 oz. respectively, from one vine; the berries of the latter measuring four inches in diameter; each vine bearing from 15 lbs. to 20 lbs. We do not note these as any thing remarkable, as we have seen Black Hamburghs weighing 4 lbs.; but they are not very common.

With these remarks, we commend the subject to the attention of all who are about commencing the cultivation of the grape: the preparation of the border is important, but it should not be overdone.

ART. II. *Descriptions and Engravings of Select Varieties of Pears.* By the EDITOR.

IN our last volume, we have described and figured *twenty-four* varieties of pears, including several remarkably fine ones, and for the first time brought before pomologists. These twenty-four, with those in our previous volumes, make the number, which we have described and figured, upwards of *eighty*, besides many others which have been noticed by our correspondents, and of which engravings have been given. We shall continue our descriptions until we figure all the fine varieties in cultivation.

85. PAYENCY. *New Duhamel. Pom. Man.* Vol. I. p. 98.

Poire de Payency, }
Poire de Perigord, } *New Duhamel.*

Payenchi, }
Payenchi, de Perigord, } of some French collections.

Paquency, *Fruits and Fruit Trees of America*, p. 404; *Horticulturist*, Vol. I. p. 447.

The Payency, (*fig. 5*.) though a pear which has been known for some time among French pomologists, is with us quite a new variety, and, we believe, has only fruited in two or three collections. Messrs. Ellwanger & Barry, of Rochester, have fruited it, and also described it in the *Horticulturist*, above referred to, under the name of *Paquency*, which is undoubtedly erroneous, for it answers precisely to the description in the *New Duhamel*, as quoted in Prince's *Pomological Manual*, and the error is natural enough, being merely the alteration of one letter. Our specimens were received from Col. Wilder, in whose collection it has fruited for three or four years. It is a very fine pear, though not quite coming up to the estimate of a first rate one, and merits a place in every good collection. The tree is of vigorous growth, coming into bearing early, and very productive,—qualities which go far to make a profitable variety. It grows freely upon the quince.

Size, medium, about two and a half inches long, and two inches in diameter: *Form*, pyramidal, very regular, largest

about the middle, and tapering into the stem: *Skin*, fair, nearly smooth, at first pale green, but, when mature, becoming of an orange yellow, much russeted at the base of the stem, and thickly traced and dotted with russet around the eye, the dots diminishing in size and number as they approach the middle: *Stem*, medium length, about an inch long,

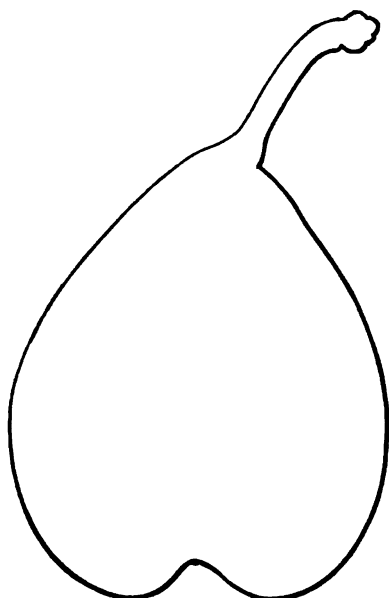


Fig. 5. Payency.

rather stout, wrinkled, brown, curved, and twisted, and obliquely attached by a slightly fleshy base: *Eye*, small, and deeply sunk in a very regular, rather open, round, smooth, basin; segments of the calyx generally wanting: *Flesh*, yellowish white, coarse, melting, and juicy: *Flavor*, saccharine, vinous, and good: *Core*, medium size: *Seeds*, large, very long, and pointed. Ripe in October.

86. BONCHRE'TIEN FONDANTE. *Hort. Soc. Cat.* 3d Ed.

This very fine pear (*fig. 6.*) has not been justly estimated by the generality of cultivators; of rather unprepossessing

appearance, having a dull green skin, with rarely more than a bronzy shade of red, it cannot claim much on the score of beauty; but it has a cool, refreshing juice, which, to lovers of such pears as the old St. Germain, the Beurré d'Arenberg, &c., will always give it a place among the best of our autumn pears. The last season, they were truly delicious, and, though we made a drawing and description of specimens given to us by the late Mr. Manning, who considered it a "first rate" variety, in 1841, we were not aware of its real excellence until we had the fruit from our own trees last year.

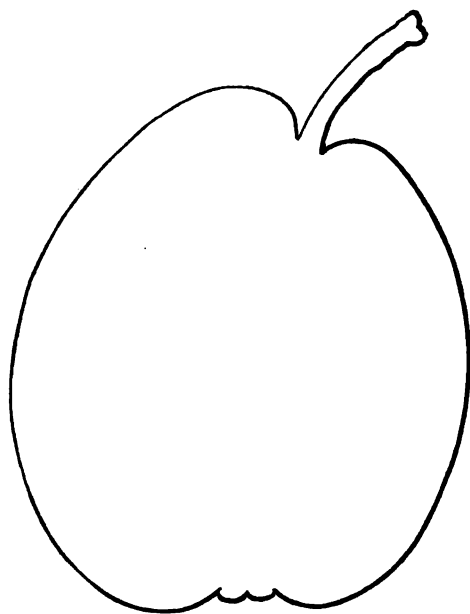


Fig. 6. Bonchrétien Fondante.

The origin of the Bonchrétien Fondante is unknown; but, according to Lindley, it is a Flemish variety, probably raised by Van Mons, which first fruited in England, in the Garden of the London Horticultural Society. It first bore here with Mr. Manning, in 1837, since which period it has become considerably disseminated, though not so extensively as its merits deserve. The tree is vigorous, hardy, and productive,

and succeeds either upon the quince or pear, coming into bearing the fourth or fifth year. Wood reddish brown, very thickly covered with small, whitish specks.

Size, medium, about two and three quarters inches long, and two and a quarter in diameter: *Form*, oblong, inclining to oval, slightly swollen on one side, largest in the middle, and obtuse at the stem: *Skin*, slightly rough, yellowish green, faintly streaked with a bronzy red on the sunny side, traced with russet on the other, and covered with scattered russet specks, and a few large patches of russet: *Stem*, medium length, about one inch long, moderately stout, curved, smooth, pale brown, and little sunk in a contracted cavity, highest on one side: *Eye*, small, partially closed, and slightly depressed in a shallow, and somewhat furrowed, basin; segments of the calyx rather short, rounded: *Flesh*, white, coarse, melting and juicy, and slightly gritty at the core: *Flavor*, rich, saccharine, sprightly and refreshing, with a pleasant perfume: *Core*, large: *Seeds*, medium size, pale brown. Ripe in September and October.

87. EYEWOD. *Hort. Transactions*, Vol. IX.

The Eyewod (*fig. 7.*) is one of the few of Mr. Knight's pears which have been proved, by American pomologists, to be worthy of general cultivation. The Dunmore has not yet been fairly tried; and the true Monarch is still unknown here. The Althorp Crassane, the Moccas, and the Eyewood, therefore, remain as the varieties which, thus far, have proved desirable.

Two good qualities which Mr. Knight's pears all have are, their exceeding vigor and hardiness, and it goes to prove that, in the production of new varieties, it is important that at least one of the parents should be of some very vigorous and hardy kind. His pears are also great bearers.

The Eyewood is a remarkably vigorous tree, making stout and strong branches, which are clothed with large buds, with prominent shoulders, giving it, very properly, the distinctive appellation of Eyewood, from the exceeding prominence of the buds or eyes. It may readily be told, in the nursery rows, from other kinds. Whether it will succeed well upon the

quince, we have not ourselves had any experience. Wood very strong and stout, yellowish brown, with large white specks.

Size, medium, about two inches long, and two and a half in diameter: *Form*, oblate, more broad than deep, flattened at each end, and largest in the middle: *Skin*, fair, little rough, pale green, becoming dull yellow when mature, somewhat traced with russet, and thickly covered with russet specks:

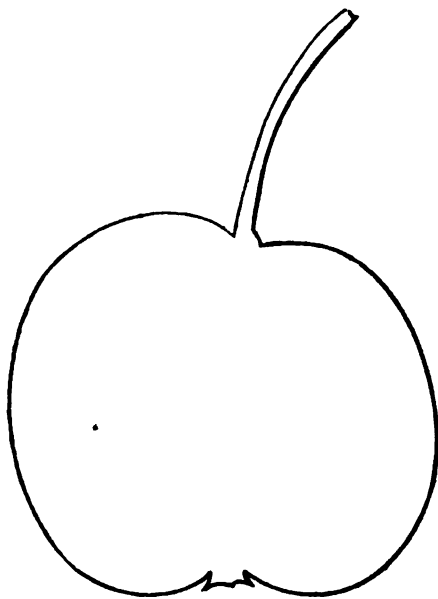


Fig. 7. Eyewood.

Stem, long, about one and a half inches, slender, curved, and inserted in a small, moderately deep cavity: *Eye*, small, open, and little sunk in a round, smooth, shallow basin; segments of the calyx short, and partially reflexed: *Flesh*, white, rather coarse, melting and juicy: *Flavor*, rich, subacid, and brisk, with an agreeable musky aroma: *Core*, large: *Seeds*, large, broad, and partially flattened. Ripe in October, and keeps for some time.

88. BEURRE' DUVAL. *Hort. Soc. Cat.* 3d Ed.

Mr. Manning has already given our readers some account of the Beurré Duval, (*fig. 8*.) in a previous volume of the Magazine, (VI. p. 89,) where he states it "to be very excellent and productive." Our opinion is, that it very nearly, if not quite, equals the Andrews, to which we compare it, not only on account of its good quality, but because it very much resembles it in form and color, as well as in the peculiar flavor

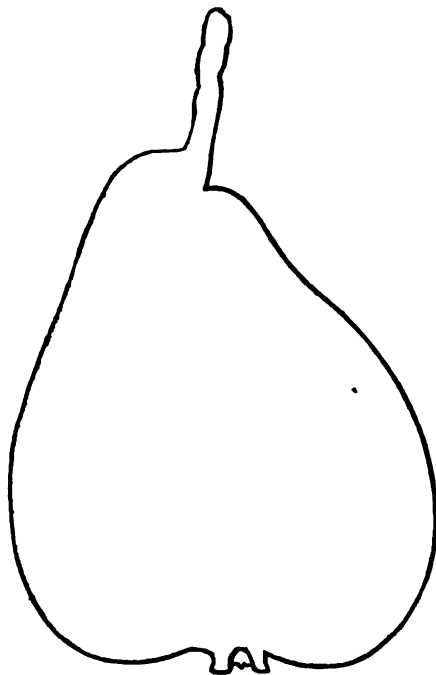


Fig. 8. Beurré Duval.

of that fine pear. It is of large size, not, however, of the first class, and of regular form, and the trees are vigorous and productive.

Mr. Manning, we believe, was the first to fruit this variety here. We find the name of Duval among the lot of scions received from Van Mons in 1836, and we presume that this was the period when he obtained it: he opened a correspondence

with M. Duval, from whom he received several kinds of pears, and he may have had it from M. Duval himself. It is a new fruit, and as yet but little known. Lindley does not mention it, although it is included in the *Catalogue* of the Horticultural Society for 1831.

The trees, we have said, are productive, and to this we may add, that they are of vigorous growth, and hardy. It succeeds also upon the quince, and trees come into bearing moderately early, about the fourth or fifth year. Wood brownish olive, with scattered, whitish specks.

Size, large, about three inches long, and two and a half inches in diameter: *Form*, pyramidal, regular, full at the crown, and tapering to the stem, near which it is slightly contracted: *Skin*, fair, smooth, pale green, marked with dull red on the sunny side, and thickly covered with small, russet specks: *Stem*, short, about half an inch in length, rather stout, knobby, straight, and obliquely inserted, in a small cavity, on one side of a swollen lip: *Eye*, large, open, and slightly sunk in a shallow, uneven basin; segments of the calyx medium length, rounded, projecting: *Flesh*, greenish white, rather coarse, melting, buttery, and juicy: *Flavor*, rich, saccharine, sprightly, perfumed, and excellent: *Core*, large: *Seeds*, medium size, long, light brown. Ripe in October and November.

89. DOYENNE' SANTELETE. *Guide to the Orchard.*

Sentelet, of some collections.

The Doyenné Santelete, (*fig. 9.*) was one of the one hundred and twenty kinds of scions of pears received from Van Mons in the spring of 1836, at the same time as the Duval. Whether or not it succeeded, we are not aware, though it was marked as living, when received. We do not recollect of ever having seen it in the collection of Mr. Manning, but, in the great number which he has fruited, we may have overlooked it. A few years ago, we obtained it from Jersey, and, the last season, our trees came into bearing; it proved to be a very excellent pear.

The *Catalogue* of the London Horticultural Society, 3d Ed., describes a variety under this name, as a "crisp" pear of

second quality, but it cannot have any reference to this pear. Lindley's description corresponds very nearly to ours, and he states that the flesh, though slightly gritty, is "tender." But with us, it is more than tender, for, although not quite so juicy as some pears, it is decidedly melting. As the specimens were grown on an open standard in the Horticultural Society's Garden, that may have made some difference.

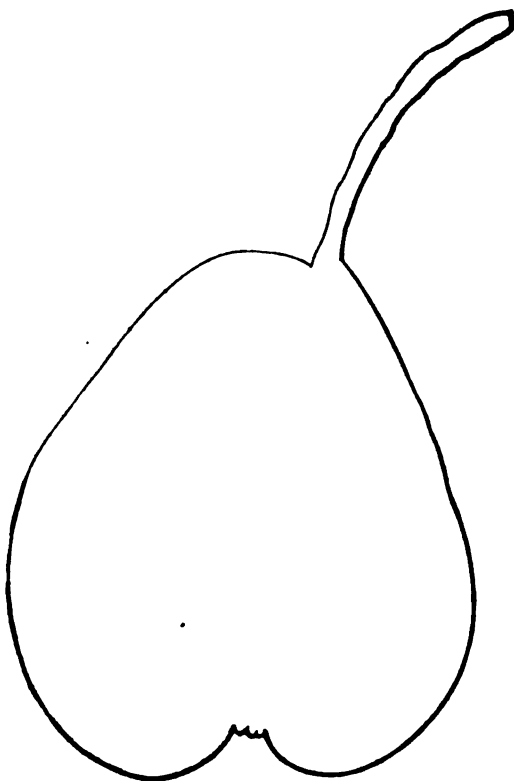


Fig. 9. Doyenné Santelete.

The Doyenné Santelete, we believe, was raised by Van Mons. It is of vigorous growth and habit, and bears tolerably young, about the third or fourth year. It also grows freely upon the quince. Wood, stout, yellowish, with large, slightly oblong, whitish specks.

Size, large, about three inches long, and two and a half in diameter : *Form*, obtusely pyramidal, with an uneven surface, full at the crown, and tapering to an obtuse point at the stem : *Skin*, slightly rough, dull yellowish green, with radiating streaks of russet from the stem, and somewhat traced with the same on one side, little tinged with red in the sun, and covered with numerous small, dark green specks : *Stem*, long, about one and a half inches, rather slender, curved, and inserted without any cavity, often on one side of the obtuse end, surrounded with small, uneven lobes : *Eye*, small, open, and rather deeply sunk in a small, smooth basin ; segments of the calyx very short, rounded : *Flesh*, yellowish white, fine, melting, and juicy : *Flavor*, saccharine, vinous, highly perfumed and delicious : *Core*, medium size : *Seeds*, medium size, obtusely pointed. Ripe in October, and keeps some time.

90. FIGUE.

The *Catalogue* of the London Horticultural Society, the *Bon Jardinier*, and various French pomologists, describe a pear under the above name, but there is some doubt as to its identity with the one now under notice. The *Catalogue* of the London Horticultural Society, in the 2d edition, (1831), describes the Figue as second size and second quality, but, in the 3d edition, (1842,) it is elevated to a higher rank, viz., second size and first quality, and, at the same time, it is designated as one of those kinds which "has proved false, or has been lost, or, for some other reason, is no longer in the garden." So far, however, as color, form, size, and quality go, there would be but little reason to doubt that our *Figue* is the same as that above mentioned ; but the season is stated to be September, and the remark added in the *Catalogue*, that it "soon decays," a remark, by the way, which cannot apply to our pear : for its season is not only two months later, but it keeps well for some time. It is true that its period of maturity may vary considerably between the climate of England and our own, and that this is a too little reliable characteristic to doubt upon. This may be. But, for the present, in the absence of more information, we shall consider it a distinct pear.

The specimen from which our drawing (*fig.* 10,) was made

we received from Mr. S. Walker, in whose collection it has produced fruit for five or six years, the original tree having been received from France seven or eight years ago. Mr. Walker agrees with us in thinking it distinct from the Figue of the London Horticultural Society. It is a very vigorous and hardy tree, bearing large crops every year, and it grows rapidly either upon the quince or pear.

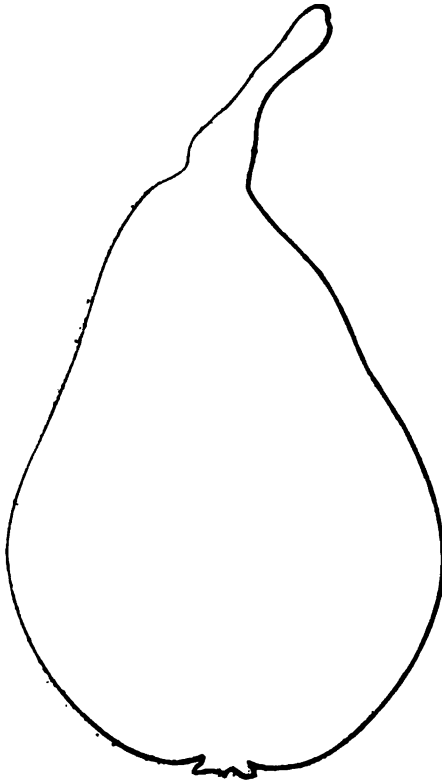


Fig. 10. *Figue.*

Size, medium, about three and a quarter inches long, and two and a quarter in diameter: *Form*, oblong pyramidal, regular, largest near the middle, rounding off to the eye, and tapering into the stem: *Skin*, little rough, thick, green, traced with russet around the crown, and broadly tinged with dull red on the sunny side: *Stem*, rather short, about three quarters of an inch in length, stout, swollen, and very fleshy at the base,

appearing like an extension of the fruit: *Eye*, medium size, open, and set even with the surface of the fruit; segments of the calyx stiff, short, and reflexed: *Flesh*, white, coarse, melting and juicy: *Flavor*, rich, saccharine, and brisk, with a slight perfume: *Core*, large: *Seeds*, large, long, and pointed, brown. Ripe in November.

ART. III. *Pomological Rules adopted by the New York State Agricultural Society, at their last Annual Meeting, with a list of Fruits which the Executive Committee recommend as worthy of general cultivation.* By A CORRESPONDENT.

THE Joint Committee of the New York State Agricultural Society, chosen, in 1846, to select a list of such fruits, for recommendation to the people of the State, as they, in their judgment, considered most worthy of general dissemination, taking into consideration the varied soils and climates of the State, made a report, in part, in January, 1847. They then reported a list of apples, which was published in the *Transactions* of the society, for 1846. The committee were continued, and those of them present at the late annual meeting, held at Albany, viz: Lewis F. Allen, Esq., of Erie Co., Dr. Herman Wendell, and Dr. E. Emmons, of Albany Co., reported the annexed list of fruits to be added to the list heretofore recommended. The State Society resolved to have a standing fruit committee, who are to report, at each annual meeting, names of varieties to be added to the lists, which, after ample trial, they may deem worthy of recommendation for general dissemination. The executive committee of the society have also, on the recommendation of the above committee, adopted a set of pomological rules for the guidance of their fruit committees, which is subjoined.

RULES OF POMOLOGY, ADOPTED BY THE NEW YORK STATE AGRICULTURAL SOCIETY, FOR THE GUIDANCE OF THEIR FRUIT COMMITTEES.

RULE 1st.—No new seedling fruit shall be entitled to a name or to pomological recommendation, which is not at least equal

to any similar varieties of the first rank already known, or which, if of second rate flavor, is so decidedly superior in vigor, hardness, or productiveness, to varieties of the same character already known, or which may be found of such superior excellence in particular regions, as to render it well worthy of cultivation,

RULE 2d.—The discoverer, originator, or he who first makes known a new native variety of merit, shall be at liberty to confer a name on it, which name, if appropriate, and coming within the rules of nomenclature, must be adopted by the writer describing the fruit for the first time; but no new native fruit can be considered as definitively named, until the same has been accurately described in pomological terms, by the fruit committee of some State agricultural or established Horticultural Society, or by some pomologist of reputation, conversant with existing varieties, or until such description shall have been published in at least one Horticultural, or one Agricultural Journal, or some pomological work of acknowledged standard character; and when two persons have named or described a new native variety, then the name first published, if consistent with the above, shall be the name of the fruit.

RULE 3d.—The description shall embrace the following particulars: The size, form, and exterior color; the texture and color of the flesh; the flavor and time of ripening of the fruit, with the addition in stone fruits of the size of the stone, adherence or non-adherence of the flesh, form of the suture, and the hollow at the stem; and in kernel fruits, of the size of the core and seeds, the length, position, and insertion of the stalk, and form of the eye. In peaches, the form of the leaf, glands, and size of the blossoms. In grapes, the form of the bunches, and in strawberries, the character of the blossoms, whether staminate or pistillate, and also, where there is any marked character in the foliage, growth of the young wood or bearing tree, the same shall be given.

RULE 4th.—In giving names to newly originated varieties, those in some way descriptive of the qualities, origin or habit of fruit or tree, or those which commemorate a particular place or person, shall be preferred; all harsh and inelegant names must be avoided, and unless the originator's name be

added, no name shall be given which consists of more than two words, and fruits introduced from abroad, shall not be re-named.

RULE 5th.— Before giving a name to a new fruit, its qualities should be decided by at least two seasons' experience, and no new fruit can be safely recommended for general cultivation until the same has been tested and found valuable, in more than one locality.

LIST OF FRUITS RECOMMENDED BY COMMITTEE, JANUARY 20TH, 1848.

PEARS.

Summer.

Bloodgood,
Dearborn's Seedling,
Madeleine.

Autumn.

Fondante d'Automne,
Bartlett,
Seckel,
White Doyenné,
Swan's Orange or Onondaga,
Stephens' Gencssee,
Beurré Bosc,
Louise bonne de Jersey,
Doyenné Gris,
Washington.

Winter.

Beurré D'Aremberg,
Glout Morceau,
Winter Nelis,
Vicar of Winkfield.

PLUMS.

Jefferson,
Huling's superb,

Reine Claude,
Schenectady Catherine,
Bleeker's Gage,
Columbia,
Peach Plum,
Lawrence's favorite,
Albany Beauty,
Washington Bolmar,
Prince's Imperial Gage,
Coe's Golden Drop,
Denniston's Red,
Prune d'Agen, for Prunes.

GRAPES FOR OPEN CULTURE.

Catawba,
Isabella.

CHERRIES.

May Duke,
Black Tartarian,
Yellow Spanish,
Holland Bigarreau,
Elton,
Downer's Late.

PEACHES.

Early Tillotson,

Crawford's Early,
 Red Rareripe,
 George IVth,
 Grosse Mignonne,
 Cooledge's Favorite,
 Malta,
 Red Cheek Melocoton,
 Brown's Morris,

Morris White,
 Yellow Rareripe,
 Royal George.

STRAWBERRIES.

Large Early Scarlet,
 Hovey's Seedling,
 Swainstone Seedling.

We are glad to present our pomological friends with the above communication, from our correspondent in Albany, and commend it to their attention.

We have already stated (p. 14,) in our note to Messrs Ellwanger and Barry's communication, that we have some objections to urge against the "Rules for American Pomology," which have lately been established by various Horticultural Societies. It may appear somewhat presumptuous in us to doubt the importance and value of such rules, established as they have been by the votes of the respective associations, or oppose ourselves to their general application; but, as the firm friend of every Horticultural improvement, we cannot consent to the enactment of arbitrary rules, which defeat the very object which they were intended to benefit. If we are wrong, we confess ourselves open to conviction, and, when convinced, we will cheerfully acknowledge our error.

The rules adopted by the Executive Committee of the N. Y. State Agricultural Society, are far better than those which have been adopted by other societies, and have little that is objectionable attached to them. In *spirit*, they are correct. Their only deficiency lies in making a *rule* of what should be a mere suggestion. On this point, our views will be understood in another article, in which we have fully discussed the whole matter. The committee have our sincere thanks for the *independence* which they have shown, in striking out a path of their own; for the position of the State Society, from the intelligence and practical knowledge which the Executive Committee bring to bear upon it, is one of importance, and will undoubtedly have a controlling influence in promoting the interests of pomology throughout the State.

The list of fruits recommended by the Executive Commit-

tee, has our entire approbation, with one exception; but, as climate may cause the difference, we need not designate that,—intended, as the list is, for the State of New York, though equally as well adapted to Massachusetts, and the other New England States, which lie to the East of her boundary.

ART. IV. *Remarks on Cyclamen Europæum*. By JOHN LEWIS
RUSSELL.

THIS little plant is said to be the hardiest of the species, which compose the group of so interesting a genus as is the *Cyclamen*. It may be considered as also one of the prettiest. According to Loudon, it is a native of Britain, and, in the *Histoire des Plantes Vénéneuses et suspectes de la France*, by M. BULLIARD, we are informed that there are several varieties, designated by the form of the leaves, as well as the color of the flowers, which are either red or white. The red, or rather pale, purplish-colored flowers, belong to the type of the species, while the pure white flowers constitute a variety. On the sixty-fourth plate of the above-mentioned work is a beautiful colored engraving of this plant in foliage and flower; and, what is singular, the leaves, buds and blossoms are represented as simultaneously developed. In this plate, the flowers are of the reddish hue. Appended to the plate is a description, which intimates that it is a “gay plant, which flowers in the woods in the month of September.” Various names are attached, such as *Le Pain de Porceau* of the French, which is synonymous with that of Sowbread of the English, and *Svinbröd* of the Swedes. Its scientific specific nomenclature indicates its distribution as an European plant, which is also inferred from a similarity of significant appellatives in various countries of the continent of Europe. The foliage is exceedingly rich, consisting of cordiform leaves, of a purplish tint beneath, and of deep green above, variegated with large round spots of white, and irregularly circumscribed with whitish lines.

The white-flowered variety is preferable for cultivation to

the original form. The flowers are of the purest white, and begin to appear before the leaves, about the middle of September, continuing to blossom for more than a month. The number depends on the strength and size of the tuber. As the flowers fade, the foliage expands rapidly, and, after all the leaves are developed, which takes some weeks, they continue until June, when, suddenly drying away, nothing more of a vital character is perceptible until the reappearance of the blossoms. The success of a good bloom, I have ascertained, depends on keeping the plant in a fresh state all the year round. A specimen of both sorts, viz., the purple flower and the white, was first treated with entire desiccation through the summer; the consequence was, the total loss of the first mentioned, and the weakening of the second to such a degree as to prevent its flowering on the succeeding autumn, as also the stinting of its foliage. By pursuing a more liberal course, I have had the pleasure of enjoying an abundance of exquisite blossoms, for the two past years, and a rich supply of leaves. I suspect that our winters would prove too severe, should it be treated as a border flower, and indeed, as such, its merits would be overlooked. It is fairly entitled to pot culture, and makes a pretty ornament for the parlor or greenhouse. Like the rest of the genus, this species does not need much pot room, nor frequent shiftings. My little plant has grown in the same pot and soil for these three years, and I find no deficiency to be remedied. In the latter part of May, I sink the pot in some shady border, where it remains until I perceive the flower-stalks rising, when, taking it into the house, it constitutes a much admired floral gem.

Several other species are known to florists, and all, I suspect, better known than this. *Cyclamen còum*, from the south of Europe, has small round leaves and pretty and rather small red flowers, of which the shape of the petals are of a rounded outline. *C. hederæfòlium* is a native of Austria according to Loudon, who speaks of it as "very scarce, and agreeably fragrant."—(*Encyc. Plants*, p. 129.) *C. vèrnum* blossoms in March, and is a spring flowerer, as its name denotes. These are pronounced as quite hardy: by this, I presume, is meant, that they need the protection of a frame, or may endure the open cultivation of England. *C. pérsicum* is

justly most admired, being a fine showy sort, blossoming all winter long, and growing to a great size. There have been many varieties of this species raised from the seed, which it produces in abundance. The most beautiful and showy is the one with white flowers. There are others with reddish, blush, and lilac tints. No blossom is more attractive for the parlor window than this, when its delicate and graceful contour and length of continuing in flower are considered. For some practical remarks relating to the successful treatment of this species, the reader is referred to an article by S. Sweetser, on the 251st page of the second volume of this Magazine, for the year 1836. Fifty or more flower-buds may be obtained from a single root, which, with proper management, attains to a great size, and therefore needs a larger sized pot than any of the preceding kinds. Amateurs who may be fond of elegant and unique collections of ornamental plants will find all the species of *Cyclamen* worthy their attention.

South Hingham, December, 1847.

ART. V. *Floricultural and Botanical Notices of New and Beautiful Plants figured in Foreign Periodicals ; with Descriptions of those recently introduced to, or originated in, American Gardens.*

Dr. Hooker's Botanical Mission to India.—The increased and increasing patronage, which the Government of this country affords to science, is a subject of high satisfaction to all naturalists. This patronage is peculiarly evinced in the liberality with which the treasures contained in the British Museum, and those in the Royal Gardens of Kew, are rendered available to the public good. In connection with the latter establishment, we have to announce that one of the most enthusiastic votaries of botany, whose name stands at the head of the present article, has just quitted this country, to further its interests. Dr. Hooker, having brought his "*Flora Antarctica*," part of the results of a previous voyage, to a close, has been appointed by H. M. Government to investigate the vegetable productions of India, and especially of the Himalaya

mountains; and, as a treaty is now in progress of negotiation between the British powers in Hindostan, and the Chinese, with reference to the boundaries of Thibet, it is possible even the latter interesting region, may be visited by Dr. Hooker, in the course of his journey. The most important assistance, in exploring the botany of Northern India, is promised to our traveller, by His Excellency the Governor General, Lord Dalhousie, and by the Court of Directors of the Honorable India Company. After spending about 12 months in this undertaking, Dr. Hooker's instructions are to return in 1849 to Calcutta, and thence proceed to Singapore and Borneo. At the latter island, the valuable aid of His Excellency, Mr. Brooke, and the protection afforded by H. M. S. Meander (commanded by the Hon. Capt. Keppel, to which ship Dr. Hooker will be attached as supernumerary medical officer), will enable Dr. Hooker to fulfil the designs of the noble and enlightened First Lord of the Admiralty, Lord Auckland, who directs that he shall pursue his botanical researches, and draw up a report on the vegetable productions of the British settlement at Labuan, and such parts of Borneo as can safely be explored. It is especially his object to ascend, if possible, the great mountain of Keeny Baloo, supposed to be 14,000 feet in height. Dr. Hooker embarked at Portsmouth, on the 11th of November, in H. M. steam-frigate Sidon, which conveys His Excellency, Lord Dalhousie, to Alexandria, *en route* for Calcutta, and he may be expected to arrive there towards the latter end of this month (December). Two or three months will probably be devoted to investigating the plains of Bengal, and particularly the fossil vegetable remains in the coal formations at Burdwan; and then Dr. Hooker will journey northward, perhaps, to Sikkim; but his exact route must considerably depend upon circumstances which it is impossible yet to foresee.—(*London Journal of Botany*.)

47. IXORA GRIFFITHI Hook. Mr. Griffith's Ixora. (*Cinchonaceæ*.) India.

A stove plant: growing two feet high: with red and yellow flowers: appearing in spring: grown in peat, leaf mould, and sand: increased by cuttings. Flore des Serres, pl. 273. 1847:

The Ixoras are, nearly or quite all of them, stove or hot-house plants, and are therefore not often seen in our collec-

tions. Some of them, however, are very brilliant: but the species now under notice surpasses them all, having a handsome habit, well branched, eminently picturesque, with ample foliage, and very large cymes, formed of a multitude of flowers with a long red tube, the limb of which is bordered with orange yellow. It is without doubt the most remarkable species which has yet been introduced. It was received by Messrs. Low, of Clapton, from Singapore, who exhibited it last July before the London Horticultural Society, where it was awarded the first prize as one of the most beautiful plants recently imported. (*Flore des Serres*, October.)

48. *CAMA'SSIA ESCULENTA*. Lindl. Eatable Camassia. (*Liliaceæ*.) North America.

Syn. *Phalangium Quámash* Pursh. *P. esculéntum* Nutt. *Anthéricum esculéntum* Spreng. *Scilla esculénta* Hook.

A hardy bulb; growing from two to three feet high; with blue flowers; appearing in May; cultivated in strong loam: increased by offsets. *Flore des Serres*, pl. 275. 1847.

Our correspondent, Professor Russell, has given a full account of this plant in the first volume of our Magazine, (p. 356,) and recommended it to the attention of amateur cultivators, as an exceedingly beautiful plant, throwing up its spike of deep blue flowers in the month of May. It was introduced into Europe as long ago as 1827, but it is yet extremely rare, and it is now figured in the *Flora* of Van Houtte. It grows abundantly in various parts of the country, and is found in Kentucky, Louisiana, in Ohio, on the borders of Lake Huron and Lake Erie, and in the Valley of the Rocky Mountains. It throws up a spike of bluish purple flowers, and its hardy character should claim for it a place in every collection. It is readily increased by offsets. (*Flore des Serres*, October.)

49. *VIBURNUM FLICATUM* Thunb. Crimped Guelder Rose. (*Caprifoliaceæ*.) China.

A hardy shrub; growing eight or ten feet high; with white flowers; appearing in May; cultivated in any good soil; increased by cuttings and layers. *Flore des Serres*, pl. 278. 1847.

This is another of the conquests of Mr. Fortune, in his China Expedition, and one of the richest acquisitions to our hardy shrubs. It somewhat resembles our own *Viburnum dentatum*; But the flowers are white, in round heads, of the size and appearance of the Guelder Rose. "Mr. Fortune states that this plant is a native of the northern parts of the Chinese empire,

and was found cultivated in the gardens of the rich, by whom it was much admired. When full grown, it forms a bush eight to ten feet high. It is a most profuse bloomer, forming numerous heads of snowball flowers, like the common Guelder roses." M. Siebold, who found it growing in Japan, says it is one of the most beautiful shrubs there cultivated. The natives have given it the name of *Satsuma Temari*, indicating that its native country is Satsuma, the most southern province of Kin-sia, 31° north latitude. It is a splendid shrub, and should be immediately introduced. (*Flore des Serres*, Oct.)

50. CAMELLIA JAPONICA, var. MINATA. Vermilion-flowered Camellia. (*Ternstroemiaceæ*.) English Hybrid.

A very brilliant variety, raised by Messrs. Low, of the Clapton nursery, from *C. myrtifolia*, impregnated with Lady Hume's blush. The flowers are bright vermilion, with pale centre, and very constant in its colors. Its abundant blossoms, the facility with which they open, as well as its neat habit, and deep green foliage, will render it desirable in every good collection. (*Flore des Serres*, Oct.)

51. TROPÆOLUM SPECIOSUM *Endlicher*. Showy Indian Cress. (*Tropæolaceæ*.) Chiloe.

A greenhouse flower; growing four feet high; with scarlet flowers; appearing in summer; cultivated in light soil; increased by cuttings. *Flore des Serres*, pl. 281.

The tropæolums are exquisite little training plants, which are very little known, and not often seen in our collections of plants: the present subject is a new one introduced by Messrs. Veitch, of Exeter, through their collector, Mr. Lobb. It is one of the prettiest species, having bright scarlet flowers, which display themselves in great abundance. As summer flowering plants, this and other species ought to be found in our collections. (*Flore des Serres*, Oct.)

52. CHIRITA WALKERIE *Gardn.* Mrs. Walker's Chirita. (*Gesneraceæ*.) Ceylon.

A stove plant; growing two feet high; with dark purple flowers, appearing in summer; cultivated in heath soil, leaf mould, and sand; increased by cuttings. *Flore des Serres*, pl. 265. 1647.

A very pretty gesneraceous plant, with a suffruticose, but succulent stem, and axillary flowers on the terminal branches; the corollas are campanulate, the tube pale, and the limb of a rich, very dark purple. (*Flore des Serres*, Oct.)

REVIEWS.

ART I. *The Rose; its History, Poetry, Culture and Classification.* By S. B. PARSONS. 1 Vol. 8vo, pp. 280. New York, 1847.

So many associations are connected with the rose, that it would be quite impossible to write a book which should not possess some interest. The few last years, however, have been prolific in treatises upon the rose, and that of Mr. Parsons comes at a time, when we had supposed the whole field had been thoroughly gleaned, and not enough remained to inspire even as ardent a devotee, as our author is, of this courtly flower, with courage to undertake the publication of an octavo volume, "labor of love" though he tells us it was, of the size of the one before us.

To the French almost exclusively belongs the credit of bringing the rose to the perfection it has now attained. More than nine tenths of the immense number of varieties which the last twenty years have produced have been the growth of French cultivators, and, latterly, they have principally been raised by Vibert, Laffay, Souchet, Verdier, and a few other florists. French authors have also done much to diffuse a taste for the cultivation of this lovely flower. Witness the splendid work of Redouté, in three quarto volumes, with beautiful plates of most of the choicest varieties which were cultivated at the period when it was published. Deslongchamps, to whom Mr. Parsons acknowledges his indebtedness, not only for many interesting facts, but for the plan of the work, has also thrown around the rose an additional charm from the research which distinguishes his volume.

Until within a few years, the rose has been much neglected by American cultivators. From the loss attending the introduction of new kinds,—the high price which they always command,—and the danger of the destruction of many of the varieties by our severe winters at the east, the finer roses have been but little sought after; add to this, that no rose could be cultivated without the loss of its entire foliage by the *slug*, and we have good reasons for the neglect of this flower, until

the great obstacle to their health and beauty was removed by the timely and valuable discovery of Mr. Haggerston. Since that period, a great change has taken place, and, at the present moment, the collections around Boston are undoubtedly superior, in variety, if not in extent, to any of the collections which have obtained so much celebrity in England. American cultivators are now in immediate correspondence with the French florists, and the new kinds are obtained as soon as they can be supplied.

To keep up with this increasing taste, two American treatises have already appeared; they have been confined, however, wholly to the culture and management of the plants, and the descriptions of flowers. Mr. Parsons has, therefore, entered a new field, and has not trod its paths without success. His object, which was to throw around the rose "a halo of pleasant thoughts and associations," has been accomplished. One of the pleasant features of the volume is the "multifarious garland" of poetical gems upon this favorite flower, which the author has gathered from various sources, wreathing among them some effusions of his own. This poetical chapter closes the miscellaneous portion of the volume, and the remainder is devoted to its culture, classification, &c.

And here it is, that we have some little fault to find with the volume. First, on the *culture* of the rose, and the improvements which have been made by hybridization, we do not learn that Mr. Parsons has even hinted at the great achievement in the culture of the rose in this country,—one, certainly, which is not surpassed even by the greatest success of Vibert or Laffay;—we refer to the production of the PRAIRIE roses by Messrs. Feast of Baltimore, and Pierce of Washington. We venture to say that no foreign rose yet raised has, in the same period, been so extensively disseminated as the Queen of the Prairies, and we freely confess that, to our mind, no efforts of English cultivators can compare with, and, certainly, none of the French excel, those of the gentlemen above named. Mr. Rivers is mentioned as having "originated some varieties," but, with the exception of George IV., none scarcely worth naming. This is an oversight which is almost unpardonable.

And, next, we refer to the *classification* of roses, and we let the author speak for himself:—

“ A difficulty and confusion exist in the classification adopted by the various English and French rose growers. By them, classes are multiplied and roses placed in them, without sufficient attention to their distinctive characters. These are subsequently changed to other classes, to the utter confusion of those who are really desirous of attaining some knowledge of the respective varieties. Even Rivers, the most correct of them all, has, in several catalogues, the same rose in as many different classes, and his book may, perhaps, place it in another.

“ If there exists, then, this doubt of the proper class to which many roses belong, we think it would be better to drop entirely this sub-classification, and adopt some more general heads, under one of which every rose *can* be classed. It may often be difficult to ascertain whether a rose is a Damask, a Provence, or a hybrid China; but there can be no difficulty in ascertaining whether it is dwarf or climbing; whether it blooms once or more a year; and whether the leaves are rough, as in the Remontants, or smooth, as in the Bengala. We have, therefore, endeavored to simplify the old classification, and have placed all roses under three principal heads, viz. :—

“ I. Those that make distinct and separate periods of bloom throughout the season, as the Remontant roses.

“ II. Those that bloom continually, without any temporary cessation, as the Bourbon, China, &c.

“ III. Those that bloom only once in the season, as the French and others.

“ The first of these includes only the present Damask and Hybrid Perpetuals, and, for these, we know no term so expressive as the French REMONTANT. *Perpetual* does not express their true character.

“ The second general head we call **EVERBLOOMING**. This is divided into five classes.—

“ 1. The **BOURBON**, which are easily known by their luxuriant growth, and thick leathery leaves. These are, moreover, perfectly hardy.

“ 2. The **CHINA**, which includes the present China, Tea, and Noisette roses, which are now much confused, as there are many among the teas which are not tea-scented, and, among the Noisettes, which do not bloom in clusters. They are, moreover, much alike in their growth and habit, and it is better each should stand upon its own merits, and not on the characteristics of an imaginary class.

“ 3. **MUSK**, known by its rather rougher foliage.

“ 4. **MACARTNAY**, known by its very rich, glossy foliage, almost evergreen.

“ 5. **MACROPHYLLA**, easily distinguished by its peculiar foliage, and straggling habit.

“ The third general head we divide again as follows :—

“ 1. **GARDEN ROSES**. This includes all the present French, Provence, Hybrid Provence, Hybrid China, Hybrid Bourbon, White, and Damask roses, many of which, under the old arrangement, differ more from others, in their own class than from many in another class.

"2. Moss Roses, all of which are easily distinguished.

"3. BRIAR ROSES, which will include the Sweet Briar, Hybrid Sweet Briar, and Autumn Briar.

"4. The SCOTCH ROSE.

"5. CLIMBING ROSES, which are again divided into all the distinctive subdivisions."—pp. 237, 239.

Now we cannot see that our author's classification is any more simple than the old. So far as possible, we would always adopt words in our own language to express any object. Now, although the French word *remontant* may do very well for those who are conversant with the French language, those who are not,—and they comprise the greater part of cultivators,—will have no conception of its meaning, while the good old word *perpetual* carries with it its true appellation. The *remontant* roses are *perpetual* until cut off by frost, as all roses are. We, therefore, cannot admit the innovation, but adhere to the old classification. In the great intermixture of classes by hybridization, it is expected that there will be some which it will be difficult to place in any particular class. But this is not important. That to which they come nearest is sufficient for all practical purposes.

But these are only exceptions to the general character of the volume. Upwards of two hundred varieties are described, and beautiful colored plates of La Reine and Chromatella accompany it. As a handsome ornament for the parlor-table, and a desirable addition to the rose-fancier's library, we heartily commend the volume.

MISCELLANEOUS INTELLIGENCE.

ART. I. General Notices.

Strawberry Runners.—I beg to give my opinion in favor of cutting the runners off strawberry plants. Being a lover of this fruit, and therefore anxious to procure information upon its cultivation, my attention was arrested by an able leading article in the *Chronicle* some years ago, against mowing off the foliage of the strawberry at the fall of the year, as also against other abuses which had crept into its cultivation. The directions given in this article I implicitly obeyed, and have every reason to be grateful for the knowledge which it imparted. But the cutting off the runners being a subject upon which that article did not enter, I was induced to ex-

periment upon it myself. For this purpose I made a new plantation, in which the plants were placed eighteen inches apart in the rows, and the rows themselves two feet asunder. I have never allowed a runner to exceed half a foot in length upon any of these, and the consequence has been that the plants have become strong and bushy. The crop this season has been abundant and the fruit individually large in size. While my neighbors' plants during winter seemed to be creeping back whence they came, not being able to bear the withering and biting blast of the season, mine stood up full of freshness and vigor, and ready to start into growth at the first approach of spring. So convinced am I of the propriety of cultivating this fruit in separate and distinct plants, and of cutting off the runners, that I have this season taken out a plant between each of my plantations, thus making the distance between each plant four feet by three. From these I am cutting off the runners with the greatest care. But why huddle up strawberry plants together and cultivate other fruits separately and distinctly? Does not this plant, as others, exclaim, in language not to be mistaken, "Give me air or I shall die?" Having procured a few of the Aberdeen Bee Hive, I observe that the instructions given with them are, that the runners be cut till the end of August, and that they be planted three apart each way.—(*Gard. Chron.* 1847, p. 669.)

Large Fruited Monthly Raspberry.—I beg to send you some raspberry canes cut off near the ground and placed in pots. The variety is, I think, one of the most valuable introductions we have lately been favored with in that class of fruits. It is, I believe, of continental origin, and may be called the "Large Fruited Monthly Raspberry;" it continues to bear from the end of August, all through September, October, and, if the frost is not very severe, (it does not mind a slight frost,) till the end of November. The late heavy rains have injured its flavor slightly; before they visited us it was quite equal in flavor, as you will observe it is in size, to raspberries in July. To ensure a very abundant crop in autumn, all the canes should be cut down in spring close to the ground; but a good autumnal crop may be obtained, as well as a crop in summer, by leaving only one cane, cut in the usual manner, to each root, cutting the others down closely for the autumnal crop. My plants are now covered with fruit in all its stages, and many lateral shoots are just coming into bloom, so that, if grown in large pots and placed under glass, raspberries may be gathered in December. [The canes submitted for inspection were healthy and fine, and loaded with fruit, which was, however, unfortunately, spoiled by travelling.]—(*Gard. Chron.* 1847, p. 686.)

Cultivation of Pears.—After some remarks on plums and cherries, Mr. Laidlaw said that there was one family of fruits which he thought deserved more attention than any he had named; he alluded to pears, many of the French and Flemish varieties of which were of far greater value than peaches and nectarines, and as some of them did not ripen their fruit well unless when grown against a wall, peaches and nectarines ought not to be cultivated to the exclusion of these. Pears required a dry subsoil, a shallow border, no manure. The horizontal mode of training was most condu-

cive to fruitfulness. Mr. Laidlaw recommended a copious supply of water at the roots of all wall trees during the time of the fruit swelling, and concluded by giving a list of what he considered the best kinds in cultivation. Mr. Moore agreed with Mr. Laidlaw that many of the pears deserved a south wall; he advocated root-pruning from a lengthened experience of its effects on pears. Mr. Rainbow said that he cultivated a great number of the best varieties of Flemish Pears as dwarf standards, the roots of which he regularly pruned, and thereby kept them in an excellent bearing condition. He approved of thinning the shoots of peaches early, and stopping those that were to remain as soon as they had completed their mid-summer growth. Mr. Croxford spoke also in favor of thinning the shoots of peaches early, but thought it advisable not to nail them to the wall until the fruit began to ripen.—(*Gard. Chron.*, 1847, p. 799.)

ART. II. Domestic Notices.

Gnaphalium Candelabrum, (Fischer ?); Chandelier-formed *Gnaphalium*, (Composite.) An annual, with numerous stems branching upward from the root in the form of a chandelier, whence its name.

Some seeds forwarded from Prof. Fischer, of St. Petersburg, to the Massachusetts Horticultural Society, received last December, contained, among other varieties, the above new (to us) species of *Gnaphalium*, of which I was able to raise a single plant, which, during the month of September, gave a profusion of heads of flowers, of no merit as an ornamental addition to the garden. They were not unlike those of the common *Gnaphalium polycephalum*, but destitute of smell. From a single root, many decumbent stems issued, which afterward assumed a somewhat upright direction, branching in a somewhat verticillate mode, and reminding one of a many-branched chandelier, so that the specific name was seen to be very appropriate. The foliage, and entire plant, indeed, were very downy, and of a silky, white, pubescent character.—*J. L. R.*, *South Hingham*, December, 1847.

Seedling Dahlias, Pelargoniums, and Roses.—I received a short note from you, some time early in the summer, in which you promised to send me some pelargonium seed, saved from your fine kinds. I have no doubt but your diversified avocations drove a small matter like that out of your head. For some four years past, I have amused myself with rearing seedlings of different kinds; and really, had I time, or if I thought you cared for it, I could describe some results of my experiments, which would surprise you. My first effort of the kind was with the dahlia. I have raised and flowered more than a hundred, and can show now as many as six seedlings, which, as our friend the doctor says, are really *better* than most of the imported varieties. "Betty Woodson," a distinct tri-color, and "Billy Button," a crimson scarlet, are small, though perfect. "Miss Leonard," a large white, with rich carmine tip, is rather more than semi-globular, and a very profuse bloomer.

In pelargoniums, I have produced from seed some dozen fine kinds, of which three, I hesitate not to say, are superior to any I have imported. I find, however, in those produced from seed, saved from my plants, a greater similarity than is desirable between them and their parents. Hence my wish for seed from abroad. I do not think that the passion for this beautiful exotic will be lasting here. Only a few, comparatively, have the means of protecting them during the winter, and very few will take the pains to follow the excellent directions, as to their culture, given by Messrs. Russell and Beck. I would be delighted to send you specimens of some of my plants.

But the rose,—the rose is my passion. I have about fifty varieties, and have succeeded in raising two from seed which are worthy of preservation. One is, *I know*, a seedling from the hybrid *remontante* “Madame Laffay.” It resembles its parent in foliage. Wood, however, is constantly glaucous-green. Rose rather larger and expanded, with a rather duller color. My other seedling reminds me of a rampant hybrid, which Mr. G. C. Thorburn sent me in 1841, and of which we are uncertain whether it be Prince’s “Pal-lagi panachée,” or the “Saudeur panaché,” of the catalogues. Mine is a cluster rose, though not a climber. I think both these will improve, as they bloomed, for the first time, only last May. I have now, in boxes, in my little shed, several hundred seed saved from fine kinds.—*Yours, Jas. P. Waddell, Athens, Ga., Dec. 1847.* [We certainly hope our correspondent will send us an account of the routine adopted to produce such seedlings as he has mentioned.—*Ed.*]

Seedling Fuchsias and Devoniensis Rose.—Is the “Maria Leonida” a microphylla or a McCartney? It is almost as vigorous here as the “Cherokee” or *Lævigata*. I have some fuchsias from seed, sent by you last February, which are three and four feet from the surface of the pot, one (which, in repotting, I discovered to be tuberous,) is about sixteen inches high, and all exceedingly vigorous. Please describe the “Devoniensis” rose. I have a beautiful rose received as such, which, however, certainly does not answer the specifications of the catalogues. It is large and expanded; very beautiful in bud; of a very pale creamy blush; rather deeper in the centre, just before full expansion, and exquisitely fragrant. Young wood, pale green, and dull red.—*Yours, J. P. W., Athens, Ga., Dec. 1847.*

[The description of the *Devoniensis* answers to that fine rose, and is undoubtedly true; it is only beautiful when in bud, but its odor is remarkably exquisite. The *Maria Leonida* is not a microphylla.—*Ed.*]

Best Stocks for Roses.—I observe, in one of your back numbers, (in reply to an objection to the Boursault for stocks, that it throws up suckers,) you ask, “What stock will not?” Let me give you a little of my experience on this point. I have done some budding, and with remarkable success. I believe that the cheapest and best stock for rose-budding, is to be procured by sowing seeds of the Champney Noisette. Sow them in the greenhouse in boxes; transplant in convenient rows, whenever safe, and, by June of the second year, they will have thrown up each a distinct and luxuriant fascicle of shoots. Select of these one or more; insert the buds; keep down all

buds and shoots till your inserted germ shall have attained strength, and you will have a stock, which will not sucker, and which, unless I am much mistaken, will last a long time. I have not confined myself to seedling stocks, but have fine standards from the Fellenberg and Comtesse de Grillon, which are not very valuable intrinsically. I have *La Reine* and *Laffay's Indigo* on a seedling stock, growing beautifully since last July, and *La Reine* and *Solitaire* on Grillon. The greatest objection to *Harri-son's Yellow*, is the number of suckers it sends up.—*Very respectfully,*
Jas. P. Waddell, Athens, Ga., Dec. 1847.

ART. III. *Massachusetts Horticultural Society.*

Saturday, December 25th, 1847.—An adjourned meeting of the Society was held to-day,—the President in the Chair.

Messrs. Walker and French, the delegates appointed to attend the Annual Exhibition of the Pennsylvania Horticultural Society, submitted the following report :—

The delegates appointed to visit the Annual Exhibition of the Pennsylvania Horticultural Society, held at Philadelphia, on the 15th, 16th, and 17th of September, 1847, beg leave respectfully to report that they have attended to the duty assigned them.

The fame of this Society, for its enthusiastic love of flowers and fruits,—its usefulness—its zeal—its gorgeous displays, rendered more efficient by the extent of its splendid Hall—and the hospitality of its members, has reached every part of our country. With a full knowledge of these facts, your Committee proceeded to Philadelphia, with the impression that they should be made wiser, if not better, by the grand exhibition they anticipated. In this, they were not disappointed. The exhibition of pot plants was truly a splendid affair. The designs were beautiful—the arrangements chaste. Indeed, every thing was so nicely managed, by the efficient committee of ladies and gentlemen, that the Hall, from its entrance to its roof, told that *the spirit of Horticulture was there.*

To go into detail is not the province of your Committee ; but they cannot refrain stating that the floral display of this society was far superior to any thing of the kind they ever visited.

The fruit department contained many fine specimens of apples, pears, plums, and peaches ; but, as this was not an abundant fruit season in that state, the specimens were not so numerous as usual.

Among the varieties of pears, we noticed several seedlings which originated in Philadelphia, and its vicinity, some of which are already known and cultivated in Europe, as of the best quality, viz. :—*Seckel*, *Petre*, *Lodge*, *Chapman*, *Moyamensing*, *Pennsylvania*, *Haddington*, *Washington*, *Copea*, *Kingsessing*, and *Tyson*.

The kind attentions and courteous civilities extended to your committee will ever be remembered and cherished. [Signed.]

Voted, That a Committee of three be appointed to settle with the Treasurer of Mount Auburn.

The President, the Treasurer, and the Chairman of the Committee on Finance, were appointed that Committee.

Voted, That the President and Secretary be authorized to send copies of the "*Transactions of the Society*," to such horticultural and agricultural societies and distinguished personages as they may think expedient.

The Committee, appointed to determine the days of the Annual Exhibition of the Society, reported that they suggest the 20th, 21st, and 22d of September next.

Voted, to accept the report, and that the Corresponding Secretary be requested to announce the same to the Pennsylvania Horticultural Society.

Meeting dissolved.

The President reported that the Committees on Flowers, Fruits, and Vegetables, had made out their lists of premiums, which had been awarded for the year 1847, which were to be published in the *Transactions* of the Society. The Reports are subjoined : —

REPORT OF THE COMMITTEE ON FLOWERS,

AWARDING PREMIUMS FOR 1847.

Premiums at the opening of the Hall.

PELARGONIUMS.—Class II.—For the best 6 varieties, to William Quant,		\$ 6 00
For the second best, to William Mellar,		4 00
FUCHSIAS.—For the best 6 varieties, to William Quant,		6 00
CINERARIAS.—For the best 6 varieties, to William Quant,		3 00
CALCEOLARIAS.—For the best 6 varieties, to William Mellar,		3 00
For the second best, to Azell Bowditch,		2 00
GREEN-HOUSE PLANTS IN POTS.—For the best, to William Quant,		8 00
For the second best, to Azell Bowditch,		5 00
CUT FLOWERS.—For the best display, to William Quant,		3 00
For the second best, to James Nugent,		2 00

Premiums during the season.

PLANTS IN POTS.—For the best display during the year, to W. Quant,		
the Appleton Gold medal,		40 00
For the second best, to Messrs. Hovey & Co., the Society's		
Silver gilt medal,		15 00
CAMELLIAS.—For the best 12 varieties, to Hovey & Co.,		8 00
For the second best, to William Quant,		5 00
PRIMULAS.—For the best 6 varieties in pots, to William Quant,		3 00
For the second best, to Hovey & Co.,		2 00
AZALEAS.—For the best 6 varieties, to Hovey & Co.,		6 00
HYACINTHS.—For the best display, to Breck & Co.,		5 00

TULIPS.—For the best 30 distinct varieties, to Breck & Co.,	. \$8 00
For the second best, to Samuel Walker,	. 6 00
PANSIES.—For the best 12 varieties, to Hovey & Co.,	. 4 00
For the second best, to Breck & Co.,	. 3 00
HARDY AZALEAS.—For the best display, to Messrs. Winship,	. 3 00
For the second best, to Hovey & Co.,	. 2 00
HAWTHORNS.—For the best display, to Messrs. Winship,	. 3 00
For the second best, to Samuel Walker,	. 2 00

Roses—In classes, as follows:—

Hardy Roses.

Class I.—For the best 30 distinct varieties, to Breck & Co.,	. 8 00
For the second best, to Hovey & Co.,	. 6 00
For the third best, to J. L. L. F. Warren,	. 4 00
For the best display, to Breck & Co.,	. 3 00
Class II.—For the best 12 varieties, to Messrs. Winship,	. 5 00
For the second best, to Azell Bowditch,	. 3 00

Perpetual Roses.

Class III.—For the best 10 varieties, to Breck & Co.,	. 5 00
For the second best, to Augustus Aspinwall,	. 4 00

Prairie Roses.

Class IV.—For the best display, to Samuel Walker,	. 4 00
For the second best, to Messrs. Winship,	. 3 00
PEONIES.—For the best 12 flowers, to Breck & Co.,	. 5 00
For the second best, to Samuel Walker,	. 3 00
PINKS.—For the best 6 varieties, to William Mellor,	. 4 00
CARNATION AND PICOTEE PINKS.—For the best 10 varieties, to Hovey & Co.,	. 5 00
For the second best, to S. R. Johnson,	. 4 00
For the best display, to Hovey & Co.,	. 3 00
DOUBLE HOLLYHOCKS.—For the best display, to Messrs. Winship,	. 2 00
DOUBLE BALSAMS.—For the best display, to William Quant,	. 3 00
For the second best, to Thomas Needham,	. 2 00
For the third best, to John Quant,	. 1 00
PHLOXES.—For the best 10 varieties, to Breck & Co.,	. 6 00
For the second best, to Samuel Walker,	. 4 00
For the third best, to Parker Barnes,	. 3 00
GERMAN ASTERS.—For the best display, to Hovey & Co.,	. 4 00
For the second best, to John Quant,	. 3 00
For the third best, to John Thomas,	. 2 00

Bouquets, Wreaths, &c., at the Annual Exhibition.

VASE BOUQUETS.—For the Marble Vases, to Hovey & Co.,	. 10 00
To J. L. L. F. Warren,	. 6 00
For the Bradlee Vases, to James Nugent,	. 10 00
To Messrs. Winship,	. 6 00

PARLOR BOUQUETS. —For the best pair, to Messrs. Winship,	\$5 00
To Charles Brims,	3 00
To Hovey & Co.,	2 00
HAND BOUQUETS. —To Azell Bowditch,	3 00
To James Nugent,	2 00
To R. West,	1 00
BOUQUETS OF INDIGENOUS PLANTS. —For the best pair, to J. Quant,	3 00
To E. M. Richards,	2 00
DESIGNS. —For the best design, to William Quant,	12 00
For the second best, to J. Thomas,	8 00
For the third best, to Hovey & Co.,	6 00
For the fourth best, to Thomas Needham,	5 00
WREATHS. —For the best, not less than 30 feet, to S. A. Walker,	10 00
For the second best, to William Quant,	5 00
For the third best, to Azell Bowditch,	3 00
GRASS BOUQUETS. —To J. L. L. F. Warren,	2 00

DAHLIAS—In Divisions, as follows:—

Division A.

PREMIER PRIZE. —To Parker Barnes, the Society's Silver medal,	5 00
SPECIMEN BLOOM. —To J. L. L. F. Warren,	3 00
VARIOUS COLORS. —For the best yellow, to Henry Reed,	1 00
For the best buff, to Parker Barnes,	1 00
For the best purple or maroon, to T. Needham,	1 00
For the best crimson or claret, to John Quant,	1 00
For the best very dark, to Parker Barnes,	1 00
For the best white, to William Quant,	1 00
For the best edged or tipped, to T. Needham,	1 00
For the best pink or rose, to Thomas Needham,	1 00
For the best scarlet, to John Quant,	1 00

Division B.

Class I. —For the best 24 blooms, to William Quant,	8 00
For the second best, to James Nugent,	5 00
Class II. —For the best 18 blooms, to Parker Barnes,	6 00
For the second best, to J. L. L. F. Warren,	4 00
Class III. —For the best 12 blooms, to Hovey & Co.,	5 00
For the second best, to William Quant,	3 00
HERBACEOUS PERENNIALS. —For the best display through the season, to Messrs. Breck & Co.,	5 00
For the second best, to Messrs. Winship,	4 00
For the third best, to Hovey & Co.,	3 00
ANNUALS. —For the best display through the season, to Messrs. Breck & Co.,	5 00
For the second best, to Parker Barnes,	5 00
For the third best, to Thomas Needham,	3 00

GRATUITIES

Awarded at the Weekly Shows and for Objects during the season.

To Marshall P. Wilder, for a fine display of Camellias, Feb. 13th, .	\$8 00
To Hovey & Co., for two fine specimens of Pimelea, March 13th, .	3 00
To Marshall P. Wilder, for display of Green-House Plants, May 15th,	8 00
To T. Willott, for the same,	5 00
To Henry Reed, for fine <i>Cytisus racemossus</i> ,	3 00
To R. M. Copeland, for a display of Hyacinths, May 22d,	3 00
To William Quant, for fine <i>Stephanòtus floribundus</i> ,	5 00
To Parker Barnes, for fine Pansies, May 29th,	2 00
To John Thomas, for Moss Vase and Flowers,	2 00
To Samuel Walker, for a display of <i>Ranunculus</i> , June 12th,	3 00
To J. L. L. F. Warren, for fine displays of <i>Rhododendron</i> , June 12th,	3 00
To J. L. L. F. Warren, for six fine Hand Bouquets,	1 00
To J. E. Teschemacher, for <i>Echinocactus Ottónis</i> , <i>E. Eryièsi</i> , and <i>Ismène calathinum</i> ,	3 00
To Hovey & Co., for fine <i>Hydránga japonica</i> , June 19th,	3 00
To John Thomas, for Vase and Flowers,	2 00
To Azell Bowditch, for Hand Bouquets,	1 00
To Breck & Co., for a fine display of Pinks, June 26th,	2 00
To John Thomas, for Designs, \$5, \$2, \$1,	8 00
To M. P. Wilder, for a fine display of New Tree <i>Pæonies</i> ,	5 00
To Marshall P. Wilder, for 10 fine varieties of New <i>Gladiolus</i> , July 3d,	5 00
To J. E. Teschemacher, for a fine <i>Hæmáanthus tenuifolius</i> ,	3 00
To John Thomas, for seven fine <i>Thunbergias</i> , July 10th,	2 00
To Thomas Needham, for <i>Buddlea Lindleyana</i> ,	1 00
To J. L. L. F. Warren, for Cactus,	1 00
To J. Nugent, for Hand Bouquets, July 17th,	1 00
To Hovey & Co., for fine Japan Lilies, July 17th,	5 00
To Parker Barnes, for Seedling Pinks, July 17th,	2 00
To Marshall P. Wilder, for a fine display of Japan Lilies, July 24th,	5 00
To Marshall P. Wilder, for a fine <i>Verónica Lindleyana</i> ,	3 00
To William Mellar, for a fine <i>Clivia nobilis</i> ,	3 00
To Joseph Breck & Co., for a fine display of Double Hollyhocks,	3 00
To Parker Barnes, for the same,	2 00
To Miss Russell, for Basket of Flowers, July 31st,	1 00
To J. Thomas, for Vase of Indigenous Flowers, August 7th,	2 00
To William Quant, for 6 fine Cockscombs, August 14th,	3 00
To J. L. L. F. Warren, for fine display of <i>Gladiolus</i> ,	3 00
To Cheever Newhall, for a fine <i>Lagerstræmia myrtifolia</i> , August 14th,	3 00
To John Thomas, for Moss Vase and Bouquet,	2 00
To Miss Russell, for Pyramid of Flowers,	1 00
To Parker Barnes, for a fine specimen of <i>Ipomopsis picta</i> , Aug. 21st,	2 00
To Hovey & Co., for two fine <i>Gesnéra tubiflora</i> ,	3 00

To Miss Russell, for Basket of Flowers,	\$1 00
To Miss Russell, for the same, August 28th,	1 00
To John Quant, for 6 fine Cockscombs, August 28th,	3 00
To Miss Russell, for Basket of Flowers, September 4th,	1 00
To Marshall P. Wilder, for a fine display of Dahlias, October 2d,	6 00
To Breck & Co., for Dahlias, October 2d,	5 00
To Miss Russell, for Bouquet,	1 00

Awarded at the Annual Exhibition.

To S. A. Walker, for Motto,	7 00
To Miss Sparrell, for Grass Designs,	4 00
To Miss Bowker, for the same,	3 00
To Jonathan Mann, for Grass Bouquet,	3 00
To Miss Russell, for two Baskets of Flowers,	4 00
To Miss Kenrick, for Baskets of Flowers and Wreath,	2 00
To Miss Russell, for a pair of Stars,	2 00
To John Quant, for a large Bouquet,	2 00
To Azell Bowditch, for a Wreath,	1 00
To Charles Brims, for Mosaic Design,	3 00
To Orr N. Towne, for Design,	2 00
To Henry Reed, for the same,	2 00
To Samuel Walker, for the same,	2 00
To Master A. Walker, for the same,	1 00
To J. L. L. F. Warren, for Hand Bouquets,	1 00
To Alexander McLellan, for fine Cockscombs,	3 00
To James McNeil, for Design,	5 00

PREMIUMS FOR PLANTS IN POTS, BOUQUETS, &c.

PLANTS IN POTS. —To William Quant, \$2, \$2, \$2, \$2,	8 00
To A. Bowditch, \$1, \$1,	2 00
To John Thomas, \$2, \$1, \$2, \$1, \$2, \$2, \$2,	12 00
To J. L. L. F. Warren, \$1, \$2, \$2, \$2,	7 00
To Messrs. Hovey & Co., \$1, \$1, \$2, \$2,	6 00
To John Quant, \$1,	1 00
VASE BOUQUETS. —To J. Thomas, \$2, \$2, \$2, \$1,	7 00
To W. Mellor, \$2,	2 00
To W. B. Richards, \$1,	1 00
To Messrs. Hovey & Co., \$2, \$2, \$2, \$2, \$2, \$2, \$1,	11 00
To J. L. L. F. Warren, \$1, \$1, \$1,	3 00
To William Quant, \$2,	2 00
To Miss Russell, \$1, \$2,	3 00
MANTEL AND PARLOR BOUQUETS, &c. —To A. Bowditch, \$2,	2 00
To William Quant, \$1, \$2, \$2,	5 00
To J. L. L. F. Warren, \$1, \$2, \$2, \$2, \$2, \$2,	11 00
To Messrs. Hovey & Co., \$2, \$2, \$2, \$1, \$1, \$2, \$1, \$1,	12 00
To Messrs. Winship, \$1, \$1, \$2, \$2, \$1, \$2, \$2, \$2, \$2,	15 00

To J. Thomas, \$2, \$2, \$2, \$2,	\$8 00
To Miss Russell, \$1, \$1,	2 00
To James Nugent, \$1, \$1, \$1,	3 00
HAND BOUQUETS. —To Hovey & Co., \$1, \$2, \$2, \$2, \$2, \$2, \$2, .	
\$2, \$2, \$2, \$1, \$2, \$2,	24 00
To J. L. L. F. Warren, \$1, \$1, \$1 \$1, \$2, \$1, \$1, \$1,	9 00
To A. Bowditch, \$2, \$2, \$2, \$1, \$2, \$1, \$1, \$2, \$1, \$1, \$1, \$1, \$2, .	19 00
To J. Nugent, \$1, \$1, \$2,	4 00
To A. McLennan, \$1,	1 00

REPORT OF THE COMMITTEE ON FRUITS,

AWARDING PREMIUMS FOR 1847.

The Committee on Fruits submitted the following report:

The Committee on Fruits of the Massachusetts Horticultural Society, respectfully submit the following Report of the Premiums and Gratuities awarded by them the present year:—

For the best and most interesting Exhibition of Fruits during the season, to John F. Allen, of Salem, the Lowell Gold Medal, valued at \$40 00

SPECIAL PRIZE LIST.

APPLES.—For the two best varieties of Summer Apples,

To E. M. Richards, of Dedham, for the Benoni, 5 00

To John Hovey, of Roxbury, for the Early Harvest, 5 00

For the two best varieties of Autumn Apples,

To Eben. Wight, of Dedham, for the Gravenstein, 5 00

To John Owen, of Cambridge, for the Porter, 5 00

For the two best varieties of Winter Apples,

To E. M. Richards, of Dedham, for the R. I. Greening, 5 00

Second premium withheld.

PEARS.—For the two best varieties of Summer Pears.

The Committee withheld these two prizes, as the specimens exhibited were not, in the opinion of the judges, meritorious.

For the best varieties of Autumn Pears,

To A. D. Williams & Son, of Roxbury, for the Urbaniste, 5 00

To H. Vandine, of Cambridgeport, for the Flemish Beauty, 5 00

For the two best varieties of Winter Pears,

To Josiah Lovett, of Beverly, for the Winter Nelis, 5 00

To E. M. Richards, of Dedham, for the Echasserie, 5 00

CHERRIES.—For the two best varieties of Cherries,

To Marshall P. Wilder, of Dorchester, for the Black Eagle, 5 00

To Samuel Walker, of Roxbury, for the Downer's Late Red, 5 00

PLUMS.—For the two best varieties of Plums,

To J. L. L. F. Warren, of Brighton, for the Green Gage, 5 00

To Samuel R. Johnson, of Charlestown, for the Washington, 5 00

The Peaches exhibited for the special prizes were not worthy.

At the Annual Exhibition in September.

APPLES. —For the best exhibition, to B. V. French, the Society's	
Plate,	\$25 00
For the second best, to J. L. L. F. Warren, the Appleton	
Silver Gilt Medal,	10 00
For the third best, to E. M. Richards,	5 00
PEARS. —For the best exhibition, to M. P. Wilder, the Lyman Plate,	
	25 00
For the second best, to Samuel Walker, the Lowell Silver Gilt	
Medal,	10 00
For the third best, to Josiah Lovett, a premium of	5 00
GRAPES. —For the best exhibited, three varieties, two bunches each,	
to Thomas Needham, the Lyman Plate,	25 00
For the next best, to Messrs. Hovey & Co.,	10 00
For the next best, to Wellwood Young,	5 00
ASSORTED FRUIT. —For the best basket of Fruit, of various kinds,	
to Otis Johnson,	10 00
For the next best, to William Quant,	7 00
For the next best, to Azell Bowditch,	5 00
For the best dish of Apples, not less than 12 specimens of one	
variety, to J. L. L. F. Warren.	5 00
For the second best, to John Owen,	3 00
For the best dish of Pears, not less than 12 specimens of one	
variety, to Samuel Pond,	5 00
For the next best, to Henry Vandine,	3 00

Premiums during the Season.

APPLES. —For the best Summer Apples, on or before the 1st of Sep-	
tember, to E. M. Richards,	6 00
For the next best, to John Hovey,	4 00
For the best Fall Apples, on or before the 1st of December, to	
Edward M. Richards,	6 00
For the next best, to Ebenezer Wight,	4 00
For the best Winter Apples, on or before the 1st of March, to	
Edward M. Richards,	6 00
For the next best, no premium awarded.	
PEARS. —For the best collection of new Pears, not exhibited before	
this year, to Marshall P. Wilder, the Society's Silver Gilt	
Medal,	15 00
For the next best, to Messrs. Hovey & Co.,	10 00
For the best Summer Pears, on or before the 1st of September,	
no premium awarded.	
For the best Fall Pears, on or before the 1st of December, to	
George Newhall,	6 00
For the next best, to Josiah Stickney,	4 00
For the best Winter Pears, on or before the 1st of December,	
to John Gordon,	10 00
For the next best, to Edward M. Richards,	6 00

CHERRIES. —For the best specimens, not less than two quarts, to	
Otis Johnson,	\$6 00
For the next best, to Samuel Walker,	4 00
PEACHES. —For the best specimens grown under glass, to William	
Quant,	6 00
For the next best, to F. W. Macondry,	4 00
For the best specimen grown in open culture, to F. W. Macondry,	6 00
For the next best, to Galen Merriam,	4 00
APRICOTS. —No premiums awarded.	
NECTARINES. —For the best specimen, to William Quant,	
For the second best, to John Fisk Allen,	4 00
QUINCES. —For the best specimens of the best kinds, to John	
Washburn,	5 00
For the second best, to Samuel Pond,	3 00
PLUMS. —For the best Plums, of the <i>best flavor</i> , not less than two	
quarts, to S. R. Johnson,	6 00
For the next best, to J. L. L. F. Warren,	3 00
GOOSEBERRIES. —For the best flavored, and finest specimens, two	
boxes, to Josiah Lovett,	5 00
For the second best, to John Hovey,	3 00
CURRENTS. —For the best flavored and finest specimens, two boxes,	
to George Wilson,	5 00
For the second best, to Otis Johnson,	3 00
RASPBERRIES. —For the best specimens of Raspberries, not less	
than two boxes, to Josiah Lovett,	5 00
For the second best, to Messrs. Hovey & Co.,	3 00
STRAWBERRIES. —For the best specimens of Strawberries, not less	
than two boxes, to Josiah Richardson, for Hovey's Seedling,	6 00
For the second best, to Augustus Aspinwall, for Hovey's	
Seedling,	4 00
For the third best, to Isaac Fay, for Hovey's Seedling,	3 00
WATER MELON. —No premiums awarded.	
MUSK MELON. —For the best Musk Melon, to Edward M. Richards,	
For the second best, to William Quant,	3 00
FIGS. —For the best specimen of Figs, to John Fisk Allen,	
For the second best, to Nahum Stetson,	3 00
GRAPES. —For the best specimens and best varieties of Grapes,	
grown under glass, previous to July 1st, to John Fisk Allen,	10 00
For the second best, to William Quant,	7 00
For the best varieties and specimens of Grapes, grown under	
glass, subsequently to July 1st, to Thomas Needham,	10 00
For the second best, to Azell Bowditch,	7 00
GRAPES, (Native.) —For the best specimen and variety of Native	
Grapes, to Kendall Bailey,	5 00
For the second best, to Charles E. Grant,	3 00

GRATUITIES.

To John Donald, gardener to Horace Gray, of Brighton, for fine Grapes exhibited at the Annual Exhibition, a gratuity of	\$10 00
To Ralph Crooker, of Roxbury, for fine specimens of Van Mons Leon Le Clerc Pears, exhibited at the Annual Exhibition, a gratuity of	5 00
To George Hyde, for a seedling Cherry, a gratuity of	6 00
To Josiah Lovett, for fine specimens of Blackberries, a gratuity of	5 00

REPORT OF THE COMMITTEE ON VEGETABLES,

AWARDING PREMIUMS FOR 1847.

ASPARAGUS.—For the earliest and best, to William Quant,	\$ 5 00
BEETS.—For the best pure blood beets through the season, to A. D. Williams,	5 00
BEANS.—For the best and earliest peck of string beans, to Jas. Nu- gent,	3 00
For the best and earliest Lima beans, to Azell Bowditch,	3 00
CUCUMBERS.—For the best pair under glass, to Thomas Needham,	5 00
For the second best, to Wm. Quant,	3 00
CORN.—For the best and earliest sweet, to A. D. Williams,	3 00
CABBAGE.—For the best drumhead, during the season, to F. W. Macondry,	5 00
For the best Savoy, during the season, to A. D. Williams,	3 00
LETTUCE.—For the best six heads, to A. D. Williams,	3 00
POTATOES.—For the best and earliest peck, to A. D. Williams,	3 00
RHUBARB.—For the largest and best, to Josiah Lovett,	5 00
SQUASHES.—For the best pure Canada, to A. D. Williams,	5 00
TOMATOES.—For the best and earliest, to A. D. Williams,	5 00
VEGETABLES.—For the best display and greatest variety at the weekly exhibitions, to A. D. Williams,	10 00
For the best display and greatest variety at the annual exhibi- tion, to F. W. Macondry,	10 00
For the second best, to A. D. Williams,	7 00

GRATUITIES.

To D. Brims, for blanched celery,	5 00
To Wm. Bogle, for Scotch kale,	3 00
To S. Reed, for a bushel of very fine seedling potatoes,	7 00
To R. Waterman, Warwick, R. I., for a bushel of early June pota- toes,	7 00
To S. W. Cole, for thirty varieties of potatoes, among them several superior seedlings,	10 00
To Josiah Newhall, for a fine display of peppers,	3 00

January 1st, 1848.—The stated quarterly meeting of the Society was held to-day,—the President in the chair.

A Committee of arrangements for the next annual meeting of the Society was chosen agreeably to the by-laws. Messrs. Walker, Lovett, and Richards, were appointed a Committee from the chair, to nominate thirteen members, and the following persons were elected :—

Joseph Breck, Chairman ; Samuel Walker, Aaron D. Williams, Jr., F. W. Macondry, Otis Johnson, J. S. Cabot, J. Lovett, J. F. Allen, David Haggerston, P. B. Hovey, Jr., E. Wight, William Quant, Parker Barnes.

The Chairman of the Executive Committee submitted a list of premiums for the year 1848. But the rules and regulations requiring some alteration, it was recommitted, to be reported at the next meeting.

The Treasurer was requested to ascertain who had been awarded medals, and to have the same prepared for the recipients.

Abel Moore, Concord, and Wm. Bogle, Melrose, were admitted members.

ART. IV. *Answers to Correspondents.*

Epiphyllum (Cactus) Russellianum. R.—Will some one detail any process for the successful treatment of this species, in order to ensure a good bloom ? It is liable to denticulate, or disjoint, in some kinds of culture, as also to drop its buds when partially grown.

We have found the same defect in its general treatment. Its culture does not appear to be well understood ; for we have rarely seen handsome specimens. We suspect that it requires rather a higher temperature, and damper atmosphere, than the ordinary greenhouse will afford. In our stove, over a dry flue, it often drops its buds ; but, in a more humid part of the house, it blooms well. Mr. Gardner, we believe, found it growing in damp shady woods in Brazil, which would indicate the treatment we have recommended, (Vol VI. p. 100.)

Abutilon striatum. R.—How should this be treated that it may open all its buds !—

We have not found any difficulty in blooming this showy plant ; and we suspect, if sufficient pot room is given it, and a liberal supply, of water, it will flower freely. If any of our correspondents have found the same trouble as R, and can give any information upon the subject, we shall be glad to receive it.

BEST DAHLIAS. X.—A list of all the best varieties exhibited in England, the last autumn, will be found in our last volume, (XIII. p. 547,) to which we would refer for full information. Twelve of the best show flowers are :—Beeswing, Marchioness of Cornwallis, Lady of the Lake, Cleopatra, Arethusa, Essex Triumph, Captivation, Yellow Standard, Master G. Clayton, Roi de Pointelles, Pantaloon, and Viscount Ressegneur.

BEST AZALEAS. *D.*—This family of plants has been greatly augmented by many beautiful new varieties, several of which are of American origin, and vie with the foreign kinds. The following are twelve sorts desirable in every good collection:—*speciosa*, *Leucomegestre*, *Còpeti*, *Remingtoni*, *Triumphans*, *Gledstanèsii*, *variegata*, *speciosissima*, *fùlgens*, *coronata*, *Triumphans superba*, and *Watsonia*.

PELARGONIUMS. *An Exhibitor.*—Twelve of the finest show flowers are: *Aurora*, crimson; *Arabella*, rose, white centre; *Rosy circle*, rose; *Mustee*, maroon; *Pearl*, white; *Orion*, dark; *Desdemona*, dark and light; *Isabella*, *Hebe's Lip*, *Competitor*, *Favorita*, and *Celestial*.

HORTICULTURAL MEMORANDA

FOR FEBRUARY.

FRUIT DEPARTMENT.

Grape Vines will soon begin to require attention: in greenhouses, they will begin to swell their eyes about the 20th of the month, and, in graperies, they will also begin to push. As soon as this is perceived, the shoots should be very carefully loosened from the place where they have been laid in, and tied loosely up to the trellis. If this is delayed, the operation may be attended with the breakage of some of the eyes. After they are tied to the trellis, they should be syringed, every fair day, both morning and evening, as this greatly assists them in breaking evenly. Should they show a tendency to break only towards the top, that part of the shoot should be bent down, and a small stone, or light weight of some kind, attached to it, to keep it in place. The eyes will then break freely at the base, and the shoot can be gradually brought up to its place.

Fig trees will now begin to break, and will require occasional syringing: if they require it, now will be a favorable time to repot the plants.

Peach trees may be brought into the greenhouse for a succession crop.

Scions of fruit trees may be cut any time this month.

Pruning orchards may be attended to now, where there is much to be done, as other operations next month will leave less time to do it properly.

Root grafting may be done now, in the manner recommended in our last volume, p. 312.

FLOWER DEPARTMENT.

Pelargoniums will now begin to make their new growth: if they have not been shifted into their proper sized pots, this should be attended to immediately,—that is, if fine, showy, well-shaped plants are desired. Attend to training out the shoots carefully, bending them little at a time, if they are stout and unyielding, until they are brought down to their proper place: nip off any very strong shoots, so as to keep a well-balanced head. Syringe occasionally, and water tolerably freely. Place the plants as near the light and air as possible. Fumigate directly as the green fly appears.

Azaleas will now begin to open their flower buds, and will require a more liberal supply of water. If it is an object to raise seedlings, now is the time to attend to the impregnation of the flowers.

Camellias will now be in full bloom, and will soon commence their spring growth. As soon as this is perceived, they should be watered more freely at the root, occasionally giving liquid manure or guano, and the foliage should be freely syringed in good weather. Attend to the impregnation of flowers for seed. Inarching and grafting may also be done now with success.

Japan lilies.—We have so fully treated upon these in our last number, that it is unnecessary to enlarge upon them now. Potting should now be attended to with all those which have not yet been done. Water freely when they have attained the height of a foot.

Achimenes of all the various kinds should be brought forward now : place them in the warmest part of the house, and pot off in very light heath soil, leaf mould, and sand.

Gloxinias and *Gesneras* should also be brought forward for a succession.

Dahlias, wanted for very early flowering, or for propagation, should now be potted.

Verbenas should now be repotted, if fine blooming plants are wanted ; and, for a spring stock, cuttings should be put in.

Schizanthuses and *Nemophilas* will require potting again.

Heliotropes should be repotted, and cuttings should be put in for a summer stock.

Pæonies will now begin to break, and should have a good place upon the stage.

Ixias, *Sparaxis*, &c. will now begin to flower, and should be liberally supplied with water.

Roses will soon be in full bloom : water liberally, using liquid guano occasionally, syringe often, and fumigate to destroy the aphid.

Pansy, and *Ten-week Stock* seed, for early flowering, should be planted now.

Cactuses should now be more liberally watered.

Fuchsias will now begin to grow, and the plants should be well headed in, or cut completely down : repot, shaking off the old soil, and syringe freely till they are in full leaf.

Petunias will require potting again.

Abutilons should be propagated now for a new stock of young and vigorous plants.

Anemone japonica should be repotted now.

Plants in frames should be well aired in good weather.

VEGETABLE DEPARTMENT.

Hotbeds should now be put into operation, if it is desirable to raise any early kind of vegetables. If the bed is immediately made up, the seeds may be planted by the middle of the month.

Cucumbers, *Egg Plants*, *Tomatoes*, *Celery*, *Cauliflowers*, *Broccoli*, *Cabbages*, &c., should be sown in drills or in pots.

THE MAGAZINE OF HORTICULTURE.

MARCH, 1848.

ORIGINAL COMMUNICATIONS.

ART. I. *Rules of "American" Pomology adopted by the Massachusetts Horticultural Society; with Remarks upon the same.* By the EDITOR.

IN our last two numbers, we have promised our readers our views upon the subject which has, of late, attracted some considerable attention among pomologists, viz., the Rules of "American" Pomology, as adopted by the Massachusetts Horticultural Society, and also by some other societies and associations, both horticultural and agricultural, in various parts of the country; but, nearly in every instance, with some variation, and, in several, with such important ones, as to give them but very few features in common: of the latter character, are those adopted by the New York State Agricultural Society, which will be found at p. 67, and by the Horticultural Societies of Albany, Rochester, Buffalo, &c. But it is of the rules for American pomology, adopted by the society first named, that we shall now speak, and discuss their propriety and utility, so far as they are designed to aid in the great object for which they were undoubtedly intended, viz., the prevention of the accumulation of synonymes, and the spread of inferior varieties of fruit. These, at least, we take to be the objects of the rules which have been enacted.

The whole matter has had our most careful consideration, and we have deferred it from our last for the sole purpose of bringing it before cultivators in such a manner as to engage their attention, and show the importance of thorough reflection before enacting any rules of such an arbitrary character as will not be adopted by all pomologists, and thus the very

object, for which it is supposed they were brought forward, wholly defeated. If our views are unsound, our columns are open to their free and full discussion.

The first rules or suggestions for a uniform nomenclature appeared in our volume for 1846, (XII. p. 53,) by our correspondent, Mr. Humrickhouse, and they appear to form the basis of those which have been recently adopted. We may therefore claim some credit for having awakened attention to this important subject.

There is something hackneyed in the expression "American" pomology, which is not in good taste, to say the least. We have heard much of an "American" literature, but we supposed that Science was universal, and that there was nothing more peculiar to the science of pomology in this country, than to that of botany, or any other science. We are not aware that our botanists have found it necessary to adopt rules for "American" botany, but supposed they were well satisfied with its principles as first taught by Linnæus. So, too, of pomology. One would imagine, from what has been said by some individuals, that pomology is something which had just originated, and that it needed the fostering care of our horticultural societies to fully establish it. Those who entertain this idea can be but little conversant with the efforts of the French and German authors, who have written upon the subject. It is unnecessary, however, for us to occupy space in discussing the want of good taste in attaching the word American: the New York State Agricultural Society, with more enlarged views, discard it entirely.

We now come to the rules, and, in order to be fully understood, we shall take them up separately:—

RULES OF AMERICAN POMOLOGY.

I. No new seedling fruit shall be entitled to a name, or to 'pomological recommendation, which is not at least equal, if not superior, to any similar varieties of the first rank already known; or which, if only of second rate flavor, is so decidedly superior, in vigor, in hardiness, or productiveness, to varieties of the same character already known, as to render it well worthy of cultivation.

Nothing can be more absurd than the first line of this rule, viz., "that no new seedling fruit shall be entitled to a name."

No societies, nor individuals, can prevent any person who may originate a fruit, from giving it a name, whether good or poor: it might as well be said that no parent should name his own child. The other part of the rule, that no fruit should be entitled to recommendation, is all very well.

II. The originator, first grower, or he who first makes known a new native variety of merit, shall be entitled to suggest a name for such variety, which name, if a suitable one, (i. e. coming within the rules of nomenclature,) shall be adopted by the writer describing the fruit for the first time. But if the name proposed is inappropriate, or does not come within the rules, then the describer shall be at liberty to give a name.

Here, certainly, is a rule at variance with all the conventional rules of science, and, in order that we may be fully understood, we quote the following from Sir J. E. Smith's *Introduction to Botany*, in regard to the principles of nomenclature:—

“Before I conclude the subject of nomenclature, I beg leave to offer a few reflections on changes of established names. It is generally agreed among mankind, that names of countries, places, or things, sanctioned by general use, should be sacred; and the study of natural history is, from the multitude of objects with which it is conversant, necessarily so encumbered with names, that students require every possible assistance to facilitate the attainment of those names, and have a just right to complain of every needless impediment. The grateful Hollanders named the island of Mauritius after the hero who had established their liberty and prosperity; and it ill became the French, at that period dead to such feelings, to change it, when in their power, to *Isle de France*, by which we have, in some late botanical works, the barbarous Latin of *Insula Franciæ*. Nor is it allowable to alter such names, even for the better. Americo Vespucci had no very great pretensions to give his own name to a quarter of the world, yet it is scarcely probable that Columbia will ever supersede America. In our science, the names established throughout the works of Linnæus are become current coin, nor can they be altered without great inconvenience. Perhaps, if he had foreseen the future authority and popularity of his writings, he might himself have improved upon many which he adopt-

ed out of deference to his predecessors, and it is, in some cases, to be regretted that he has not sufficiently done so. In like manner, the few great leaders in natural knowledge must and will be allowed to ward off and to correct, from time to time, all that may deform or enfeeble the prevailing system. They must choose between names nearly of the same date, and even between good and bad ones of any date.* A botanist who, by the strength of his own superior knowledge and authority, reforms and elucidates a whole tribe of plants hitherto in confusion, as a Hedwig in Mosses, or Acharius in Lichens, ought to be unshackled in every point in which he can be of service. His wisdom will be evinced by extreme caution and reserve, in using this liberty with respect to new names, but more especially new terms; and, after all, he will be amenable to the general tribunal of botanists, and the judgment of those who come after him. Few, indeed, are illustrious enough to claim such privileges as these. Those who alter names, often for the worse, according to arbitrary rules of their own, or in order to aim at consequence which they cannot otherwise attain, are best treated with silent neglect. The system should not be encumbered with such names, even as synonyms."

This is sufficiently explicit to show the principles which should govern all pomologists in naming fruits; but, in order to show the impropriety of a portion of the second Rule, we will instance the following:—

Suppose an individual to originate a new seedling fruit, and to give it a name; and suppose he did not deem it necessary to give a full description of it to any pomological author; we shall still further suppose that, as a nurseryman, he sells his trees to various persons in all parts of the country, under his favorite name: after a while, some one who purchases and raises the fruit, sends a specimen to some society, or editor of some horticultural paper, to be named and described; the society or editor, knowing nothing of its origin, give it a name of their own, because, according to the rule,

* I cannot but wish the very eminent Prof. De Candolle had assumed this privilege, so justly his due, in order to do good instead of mischief to the nomenclature of botany. But, with him, priority of date regulates every thing.

they have the right to do so; and, being *first* published, it also becomes the name. Is it supposed that those who originate new and fine fruits have so little pride, that they will consent to this? Certainly not; and thus commences the accumulation of synonyms.

III. No new native fruit shall be considered as named until the same has been accurately described, in pomological terms, by some competent person conversant with existing varieties, some pomologist of reputation, or the standing fruit committee of some established horticultural society.

This is entirely superfluous; to say that no fruit can be considered as named until described by some "competent" person, or by the committee of some horticultural society, is equally as absurd as the preceding: there might be some doubt as to who are "competent persons" or "pomologists of reputation." It is enough that the name of a fruit is even published with the most *brief account* of it, to establish its name.

IV. The description shall embrace the following particulars: 1st. The form and exterior color, the texture and color of the flesh, and the flavor of the fruit, with the addition, in stone fruits, of the size of the stone, adherence or non-adherence of the flesh, form of the suture, and the hollow at the stem; and, in kernel fruits, of the size of the core and seeds, the length, position and insertion of the stalk, and form of the eye. In peaches, the form of the leaf-glands and size of blossoms; in grapes, the form of the bunches; and, in strawberries, the character of the blossoms, whether staminate or pistillate; and also, where there is any marked character in the foliage, growth of the young wood, or bearing tree, the same shall be given.

There is no objection to this.

V. The name of the new variety shall not be considered as established until the description shall have been published in at least one horticultural or one agricultural journal, having the largest circulation in the country, or some pomological work of large circulation and acknowledged standard character.

By Rule No. III., we have seen that no fruit could be named unless described by some "competent person" &c.; and now we learn that the name shall not be considered as established unless published in a journal of the **LARGEST** circulation in the country, &c.! Truly this is the climax of absurdity.

According to this rule, a fruit may be described in one horticultural paper; but, if the editor of another finds, after much search, that his circulation is *larger*, he can rename it; and, if a third finds his is larger still, he can give it another title. So, too, of some pomological work of "acknowledged standard character." What can this mean? Are there any treatises upon fruit, which, describing a new variety for the first time, any individual will undertake to say, do not possess sufficient character to establish its name? Why, then, the peculiar and incomprehensible wording of this rule? Nothing more was required than to say that whatever name was adopted should be immediately made *public*.

VI. In giving names to newly originated varieties, all harsh, vulgar, or inelegant names shall be avoided, such as "Sheepnose," "Hogpen," etc.

VII. No new names shall be given, which consist of more than two words, excepting only when the originator's name is added.

[Thus all unnecessarily long titles, such as "New Large Black Bigarreau," "Beurré gris d'hiver nouveau," will be avoided.]

VIII. Characteristic names, or those in some way descriptive of the qualities, origin, or habit of fruit or tree, shall be preferred. They may be either of intrinsic properties, as "Golden Sweeting," "Downer's Late," etc.; or of local origin, as "Newtown Pipplin," "Hudson Gage;" of the season of ripening, as "Early Scarlet," "Frost Gage;" of the form of the color, as "Golden Drop," "Blue Pearmain;" or which commemorate a particular era, place, or person, as "Tipeecanoe," "La Grange," "Baldwin," or any other titles which may be significantly applied.

IX. All superfluous terms shall be avoided; thus, instead of "Thompson's Seedling Beurré," it is better to say "Thompson's Beurré," or simply "Thompson's Pear."

All these are quite superfluous; and they affect a pedantic air, which would lead one to suppose that horticulturists were so ignorant as to be unable to select euphonious or appropriate names. The New York State Society, with more respect for the intelligence of cultivators, has struck them all out.

X. Before giving a name to a new fruit, its qualities should be decided by at least two seasons' experience.

This rule is all very well, because it is in the shape of *advice*. "No fruit *should* be, &c." If made imperatively, it would be wholly objectionable.

XI. When two persons have named or described a new native fruit, then the name and description first published, if according to the rules herein indicated, shall have the priority.

Leaving out the words "if according to the rules herein indicated," this is the only important rule among the whole thirteen, for it advocates *priority*.

XII. No person, introducing new fruits from abroad, shall be allowed to re-christen the same, or give them his own name; but shall submit the same to some competent pomologist to ascertain the true name.

This rule has nothing very objectionable. But it does not express its object in a very perspicuous manner.

XIII. In deciding the names of fruits already described, the latest edition of the "Catalogue of the London Horticultural Society" shall be considered the standard European authority, and the latest edition of Downing's "Fruits and Fruit Trees of America" the standard American authority.

This rule is of some import. It adopts, for standard authority, two pomological works, and makes it imperative that all names shall be referred to these authorities. We have heretofore given our opinion in relation to the standard character of the *Catalogue* of the Lond. Hort. Soc., and have, in most instances, been governed by it, as our readers well know: but, where known and palpable errors occur, we have not been so prejudiced, or blind to the interests of pomology, as to adopt them. Our correspondent, Mr. Humrickhouse, in the article before referred to, has expressed our views so fully on this point, that we quote his words:—

"A few have had recourse to the *authority* of the London Horticultural Society. No authority, merely as such, is better. As worthy co-laborers in the work, none have gone beyond, or contributed more "to bring order out of confusion" in the arrangement of the nomenclature of fruits. Their success is hailed with satisfaction, and their decisions are received with deference. In most cases, and until the contrary is shewn, we need not hesitate in adopting them; in some, the weight of testimony in the opposing scale may oblige us to *reject* them."

So far, therefore, as it was necessary to choose any authority, none could be better than the London Horticultural Society's Catalogue; because the means which have been used to arrive at the results have been the only ones which can claim any respect or consideration, viz., actual inspection and comparison of the fruits. Yet it should not be obligatory to strictly follow it. On the other hand, however, this rule adopts, for a standard American authority, a work which cannot be looked upon in any such light; for, probably, not one quarter of the fruits have been subjected to careful inspection and comparison. Hence, the impropriety of adopting such, especially when it is well known that no American author has ever done half so much towards creating confusion in our nomenclature, by attempting to re-name our well-known fruits: all the conventional rules of science have been entirely disregarded; and, to say nothing of the great confusion of synonymes, we have upwards of a *dozen* well-known fruits, which have been *re-christened*. If every pomological author were to take the same liberty, there would be no hope of arriving at a correct nomenclature. To make it imperative to follow any such authority, is only to increase instead of lessening the confusion already existing.

We have thus, in as brief a manner as possible, presented our objections to the Rules which have been adopted. We have stated that we believe there is no necessity of but a very few plain and concise rules, not adopting any thing new, but merely reasserting those which have always obtained, and something of this kind, in conclusion, we shall attempt.

We are inclined to believe that some of our horticultural societies, in the zeal which animates some of their members, have erroneous views of the objects of such associations. We had always supposed they were to encourage *skill* in cultivation, and to make *known* new varieties of fruits, flowers, and vegetables, by the award of liberal premiums for superior specimens;—not to say what fruit shall have a *name*, and what shall not;—not to say that all descriptions of fruits shall be made by pomologists, or fruit committees of the respective societies;—not that no fruit shall be considered as named unless the name be published in some journal having the *largest* circulation;—these are all subjects quite beyond their province and control.

The London Horticultural Society's Catalogue is adopted as a standard authority. With such a respect for the labors of this society, why should not that correct principle, which has always governed the institution, ever since its formation, be also adopted? It is expressly stated, in the preface to all the *Transactions* of the Society, (eight large quarto volumes,) that, upon "NO QUESTION, AS A BODY, WILL THE SOCIETY EXPRESS AN OPINION." This is thoroughly carried out. Every article in the *Transactions* has the signature of the writer, and, whether correct or not, he alone is answerable for it. The value of this principle is best attested by the harmony and good feeling which has always prevailed, in the hearty coöperation of all the members, and in the success which has attended the efforts of the Society in promoting the cause of horticultural improvement.

There are other considerations which we should like to urge, had we not already exceeded our allotted space. But these we must omit till another time: as fully elucidating our own views, we would invite the careful perusal of Mr. Humrickhouse's article, (XII. p. 47.)

We have already remarked, that there was no necessity of any *new* rules for Pomological science. If it was important to reassert the principles which have always prevailed, then perhaps, they might with propriety be introduced at this time. But it is of the utmost consequence, that they should be such as will unite the coöperation of *every* intelligent cultivator in the country. Nothing less than this, will be of any purpose, but rather a hindrance in attaining the much desired object. If one society adopt one set of rules, and another a second; and if influential nurserymen will not move in concert with these societies, it will only make confusion worse confounded.

We have, therefore, drawn up what we conceive to be a set of rules, which can be universally adopted, and attain all the objects desired. Pomologists will be amenable for all violations of conventional rules, in regard to names, and our horticultural societies, acting within their appropriate sphere, can recommend only those fruits which in their opinion appear worthy of cultivation. No synonyms will then find a place in horticultural or agricultural journals, or in pomological works, or in respectable catalogues; and if they are not found

in any of these, there is little fear that they will impede the attainment of that great desideratum, a correct NOMENCLATURE.

RULES FOR A UNIFORM NOMENCLATURE OF FRUITS.

I. No new seedling fruit shall be recommended for general cultivation, which is not at least equal, if not superior, to any similar varieties of the first quality already known; or which, if only of second rate flavor, shall possess such characteristics of vigor, hardiness, productiveness, or adaptation to various soils, or which may have been found of such superior excellence in particular regions, as to render it worthy of cultivation.

II. The discoverer or originator of a new fruit, is always at liberty to give a name; but if he prefer or desire it, he may refer it to some horticultural society, or to some pomologist for that purpose; and this name should be adopted by the writer describing the fruit for the first time, and be considered as established;—provided that the name is made public, either by publication in some horticultural or agricultural journal, or some pomological work. Well known local names of old fruits, newly introduced, should always be retained.

III. Priority of date shall always decide the name of a new fruit when described by two persons; and the authority should always accompany the name, in all pomological works, or horticultural journals, devoted to the interests of the science.

IV. Descriptions of fruits should embrace the following particulars:—The size, form, and exterior color; the texture and color of the flesh; the flavor and time of ripening of the fruit, with the addition, in stone fruits, of the size of the stone, adherence or non-adherence of the flesh, form of the suture, and the hollow at the stem; and, in kernel fruits, of the size of the core and seeds, the length, position, and insertion of the stalk, and form of the eye. In peaches, the form of the leaf, glands, and size of the blossoms. In grapes, the form of the bunches, and, in strawberries, the character of the blossoms, whether staminate or pistillate, and also, where there is any marked character in the foliage, growth of the young wood or bearing tree, the same shall be given.

V. Before naming a fruit, its qualities should be decided by at least two seasons' experience; and no new fruit can be safely recommended for general cultivation until the same has been tested and found valuable in more than one locality.

ART. II. *Grafting Grape Vines.* By ALEXANDER MARSHALL,
Esq., West Chester, Pa.

THE cultivation of the grape is becoming very extensive as an article for the market, as well as for consumption by those who grow them; and one which cannot be too highly prized as a delicious and wholesome fruit. Almost every one loves to eat a plate full of good grapes, but very few know how to cultivate them, and fewer still know what varieties to select as best suited to the soil and climate of their particular location. So that, after having reared a few vines to a proper bearing age, they are disappointed in the crop by having been unfortunate in their selection. They thus become disheartened, and suffer the vines on which they have bestowed so much attention, and watched with so much solicitude, to perish for want of the very treatment that would make them productive of good fruit. To such I would say, Cheer up; those vines are very valuable; their variety can soon be changed by the process of GRAFTING.

If the reader will have a little patience, I will give him my experience on this subject. Some years ago, I planted a vineyard, and, to make the variety as extensive as possible, having a strong partiality for native plants and fruits, selected cuttings from many wild varieties on the neighboring hills and in the surrounding valleys. After bestowing a great deal of labor and attention on them for several years, I found that they would not meet my expectations as fruit-bearing vines, and concluded to try the experiment of grafting them. Having prepared myself with scions for the purpose, I commenced one morning, about the last of March, by removing the soil from the vine to the depth of five or six inches; sawed off the

vine about two inches below the surface; smoothed the end of the stump with a sharp knife—split the stump in the centre with a chisel—cut the butt end of the graft in the shape of a wedge, so that the first bud would come on, or immediately above, the shoulder of the stump, leaving but two buds on the graft, one of which would come above the surface of the ground. The stumps being from an inch to an inch and a quarter in diameter, I put two grafts in each stump, one in each side, with the outside bark to coincide with that of the stump—covered the top and cleft sides of the stump with grafting wax (made of beeswax, rosin and tallow) so as to prevent the bleeding of the sap—replaced the soil carefully around and over the stump, covering the first bud and leaving one only above the surface, and marked the place with a stake to prevent accident. I used no matting or tying of any kind, the stump being strong enough to hold the grafts.

I thus grafted one hundred and twenty vines the same day. It so happened that when the grafts were set in the last twenty stumps, and the wax adjusted, ready for replacing the soil, I was called from the field for some purpose, and the soil was not replaced about the stumps for two or three days. Now mark the difference occasioned by so slight an accident. Of the first hundred, not more than four or five missed growing—of the last twenty, full one half missed. The grafts that grew, did well, and the next year produced a crop of fine *Catawba* Grapes.

I have since grafted grape vines the same way, and with equal success, always being careful to replace the soil immediately.

West Chester, Pa., Feb. 1848.

ART. III. *Pomological Notices; or, Notices respecting New and Superior Fruits, worthy of General Cultivation.* By the EDITOR.

In our last volume, (XIII. pp. 112, 448,) we noticed several new pears, peaches, grapes, and apples, and some of the

varieties were subsequently fully described and figured in the same volume.

Quite a number of new fruits have been brought to notice the last two years, the greater portion of which we have already given some account of; but there are others of considerable reputation which we have not found the opportunity to mention, and which we now shall briefly describe.

PEARS.

Westcott.—This is a new variety, a native of Rhode Island, growing in Cranston, and recently brought to notice. Specimens were exhibited at the last annual meeting of the R. I. Hort. Soc. It is of medium size, roundish obovate form, with a green skin, becoming yellow when mature. Flesh white, melting and juicy, with a rich saccharine flavor. It ripens in September.

Abbott.—Another Rhode Island pear, produced from seed in Providence, in the garden of Mrs. Thomas Abbott. It is of medium size, and oblong obovate form, with a dull green skin, considerably marked with bright red. Flesh melting and juicy, with a sugary, brisk, and fine flavor. Ripe in September.

Shurtleff's Seedling.—A new pear, raised by Dr. S. A. Shurtleff, in Boston, several years ago, and the parent tree removed to Roxbury, where he now resides. It is a very good pear, having something of the character of the Gansell's Bergamot, and resembling it in shape and size. The skin is of a light yellow, deeply tinged with red on the sunny side. Flesh melting and juicy, with a saccharine, brisk, and fine flavor. Ripe in September.

Totten's Seedling.—A New Haven pear, raised by Col. Totten, of that city. A few specimens, kindly presented to us by Mr. S. D. Pardee, of the same place, were of such promising quality as to render it deserving of notice. It is of medium size and obovate form, with a rich yellow skin slightly tinged with red in the sun. Flesh fine, melting, and juicy, with a rich, sweet, perfumed, and excellent flavor. Ripe in September and October.

Belle Apres Noel.—A new Belgian pear, of the first class, which fruited in our collection last season for the first time in

the country. It is of large size, and handsome, obovate form, with a yellow skin and a brilliant crimson cheek : the flesh is yellowish, melting and juicy, with a rich, perfumed, and delicious flavor. Ripe in December. This will, we trust, prove to be a great addition to our winter pears.

St. Dorothee.—A new variety received from France, and fruited here for the first time last year. We have already alluded to it in our visit to the nursery of M. Jamin, (XI. p. 205,) as the *St. Dorety*. It is of good size, with a dull green skin, somewhat traced with russet. The flesh is remarkably melting and juicy, with a saccharine, sprightly, and highly perfumed flavor. It ripens in October. So far as we may judge from the few specimens we had on our tree, we should esteem it one of our best autumn pears.

Excellentissima.—New, from France. A very large, handsome, and excellent pear, nearly six inches long. The skin yellow, richly tinted with crimson on the sunny side : flesh yellowish, melting and juicy, with a sugary and delicious flavor. Ripe in November, about the same season as *Van Mons Leon le Clerc*.

Ferdinand de Meester.—A variety received from France under this name proved to be very superior fruit : of medium size, and obovate form, with yellowish green skin, and a rich and musky flavor, perhaps too much perfumed for some tastes. Ripe in October. We apprehend the *Rousselette de Meester* will be found a synonyme of this.

Beurré Gris d'hiver nouveau.—A new and decidedly valuable acquisition to our late pears ; possessing qualities similar to the old *Brown Beurré*, but less acid, and fully as high-flavored. It also ripens freely, and the skin is of a rich cinnamon russet. Season, December to February.

Colmar d'Aremberg.—Since our brief notice of this pear in our last volume, (XIII. p. 188,) we have had it in fruit in our collection, and have also made a description from some splendid specimens received from N. Stetson, Esq., of Bridgewater. We consider it a most desirable acquisition ; of the largest size, and ripening at a desirable season. Though not quite first rate, when compared with the *Beurré d'Aremberg*, or *Passe Colmar*, yet it has a great deal of the character of the latter variety. Its size, beauty, and early bearing are

also qualities which add greatly to its value. We shall fully describe all these in the course of the present volume.

The following descriptions of several new varieties which have recently been brought to notice, are copied from the *Bon Jardinier*, for 1848:—

Beurré Bretonneau.—Fruit regularly oval, at first deep green, afterwards becoming yellow and dotted with russet: stem short: flesh melting and sugary. Ripe in March and April.

Beurré d'Esperins.—Fruit large, of first rate quality: flesh melting and perfumed. Ripe from February to May.

Beurré Giffard, (or *Giffart*).—A melting fruit, of the size of the St. Germain. Ripe the end of July. Branches slender; and the tree very suitable for forming a pyramid.

Bon Gustave.—Fruit pyramidal, about seven inches in circumference: skin greenish yellow, with large irregular spots: stem long and slender.

Calebasse d'Hiver.—Fruit turbinate, of the size of the Brown Beurré: flesh half-melting. Ripe in February and March. The tree is not very productive as a pyramid.

Cassante de Mars.—Fruit of the size and form of the preceding; flesh crisp. Ripe in March and April. It does not thrive on the quince.

Catinka.—Fruit roundish or turbinate, of the size of a Catillac: the flesh is melting, but it must be eaten when just in perfection; for it soon decays. Ripe in November and December. The tree vigorous and productive, and suitable for a pyramid.

Duc de Nemours.—Fruit oval, upwards of two and a half inches in diameter, and nearly four inches in length: stem obliquely inserted; skin smooth green, sprinkled with gray spots: it acquires a yellowish tinge on approaching maturity. The flesh is white, tender, and melting.

Passe Tardive.—Fruit of the size of a St. Germain, nearly as broad as long, swelling in the middle; flesh crisp; will keep a year. Tree middle-sized.

Poire Faurite.—Fruit of the size and form of a small short St. Germain; skin, yellow, shining, tinged with red next the sun, and marked with numerous small reddish dots; the eye

is shallow; stem of medium length and thickness, fleshy at its junction with the fruit; flesh yellowish white, half-melting, and tolerably fine-grained, with a peculiar slight perfume. Keeps nearly a year.

Reine des Poires.—Fruit of the size of the *Passe Colmar*, turbinate; skin reddish; flesh half-melting. Ripe from November to January. [This is different from the old *Reine des Poires*.]

Triomphe de Jodoigne.—A large pyriform fruit, five inches in length, and three and a half in diameter; eye depressed; stem short and thick; skin deep yellow, slightly tinged with green on the shaded side, and deep red in the sun; flesh melting and perfumed. Ripe in November. The tree is very vigorous.

Vauquelin.—Fruit large, oval, jutting out towards the middle, or oblong-turbinate, obtuse at the stalk: flesh slightly coarse, with an abundance of juice, of a rich, subacid, perfumed flavor. Ripe from November till March.

Arbre Courbe.—Fruit of the size of the *St. Germain*; flesh melting. Ripens in October and November. Tree vigorous and fertile; very irregular in its growth, and requires particular management as a pyramidal tree.

APPLES.

In our last two or three volumes, we have noticed quite a number of apples which have been brought to notice in the West, and most of which have been supposed to be seedlings. A few of them, however, have proved to be old kinds, which had been carried from the East in the early settlement of the country, and others may yet prove synonymous with our well known apples. The *Putnam Russet* was asserted to be a new western variety, and was so described by some authors. Two years ago, (Vol. XII. p. 3,) when we stated that it was merely a synonyme of the old *Roxbury Russet*, our correspondent, Mr. Ernst, called upon us to show our authority for doing so, (XV. p. 135.) This we did, as we then believed, satisfactorily to any reasonable cultivator, and, since then, we are glad to learn that it is admitted, even by those who described it as the *Putnam Russet*, to be no other than the *Roxbury Russet*.

In another page, we have briefly reviewed a small pamphlet, containing the *Transactions* of the Ohio Nurserymen and Fruit-growers' Convention, held at Columbus in September last. Quite a number of apples were brought to the convention by the various members from all parts of the State, and some new kinds, or at least supposed new ones, were among them. It is very probable, however, that some, which the committee name, describe, and give outline engravings of, will prove to be old varieties; but, in order that pomologists and cultivators may be made acquainted with them, we have selected the following among those which appear to be new. We have previously described (Vol. XI. p. 206, and XII. p. 476,) a large portion of the varieties which are enumerated in the *Transactions*.

White Pippin.—A fine fruit, uniformly fair, of a size larger than the Newtown Pippin, the trees more rapid growers, a great keeper, suited to the table, and fully equal to Newtown Pippin in March and April. It is supposed to have come from Virginia or Kentucky.

Willow, or *Willow Twig*.—A great keeper, and of good size,—regarded as among the most valuable apples cultivated on the Ohio River. Size large; form globular, or nearly so; skin of a dull greenish yellow: stem short: flesh yellowish, juicy, pleasantly acid, but not of high flavor. Keeps until April or June. It is stated to have been brought from New Jersey.

Springer's Seedling.—Exhibited by the Rev. C. Springer, and claimed by him as a seedling. Fruit of 1846 and 1847 were exhibited together. A great keeper, and extremely valuable. Fruit small, oblong, oval in form, dull yellowish green, with stripes of red.

Wells.—Cultivated under the name of Striped R. I Greening and English Winter Red Streak in some localities. Does well in all soils; is a very desirable apple; a good bearer, and keeps until April. Fruit large, roundish, a little flattened, often one-sided, and narrowing to the eye; skin bright yellowish green, streaked and blotched with red next the sun: flesh white, tender, juicy, with a sprightly acid flavor. As a baking apple, it is unsurpassed. Ripe from November to March.

The trees grow very vigorously, with spreading tops and slender branches, and bear abundantly every year.

Polly Bright.—A variety of fine appearance, much resembling good specimens of the Maiden's Blush. It is said to be a native of western Virginia in the neighborhood of the Monongahela. Decidedly a good keeper, a fine bearer, often large, always handsome and good.

Fall Wine.—From Belmont county, and believed to be undescribed. It is one of the best flavored apples of its season, which is September and October.

Red Ashmore.—A beautiful apple, said to have been introduced into Ohio, from Brownsville, Pa. It may be called one of the most beautiful apples grown. The tree is a moderate bearer. Fruit about medium size, and often large: form globular: skin smooth, clear, beautiful deep red: flesh yellowish white, juicy, delicate, and very pleasant. Ripe from October to December.

Western Spy.—A seedling of Wayne, Jefferson Co.; blossoms are not injured by frost, and therefore deemed valuable. Fruit large, of globular form, slightly flattened: skin clear yellow, with pale red cheek, and surface dotted with small white or gray specks: stem short and stout: Flesh yellowish white. Keeps until March.

Ohio Nonpareil.—A large apple, of round form, little irregular, and somewhat ribbed; skin rich yellow ground, striped and splashed with rich clear red: stem short, in a deep cavity: flesh yellowish, crisp, tender, juicy, and with a flavor somewhat resembling the Gravenstein, though it lacks the spiciness of that variety. Ripe in October.

Philips Sweeting.—A large and handsome sweet apple, which has already been noticed by us, (Vol. XIII. p. 187.) It is supposed to be a seedling of Coshoccon Co., Ohio. It is a thrifty and great bearer: fruit remarkably handsome: color red, or striped with dark red, over a ground of mottled red and yellow: size medium: form nearly round, and little flattened: stem three quarters of an inch long: flesh, rich, yellow, tender, juicy, and crisp, with an agreeable flavor. Ripe from November to March.

Many other varieties are briefly noticed, whose names appear to be new; but, as no particular descriptions are given, we defer an account of them till another year.

ART. IV. *Descriptions and Engravings of Select Varieties of Apples.* By the EDITOR.

XIII. EARLY HARVEST. *American Orchardist.*

Large Early Harvest. *Thacher's American Orchardist.*
 Prince's Harvest, or
 Early French Reinette, } *Coxe's View, &c.*
 July Pippin. Floy, in *Guide to the Orchard.*
 Large White Juneating, }
 Yellow Harvest, } of some American collections.
 Tart Bough,
 July Early Pippin, }
 Large Early, } London Hort. Soc. Cat. 3d Ed.

The Early Harvest, (*fig. 11.*) is undoubtedly the finest early apple we possess. Of full medium size, it has a rich

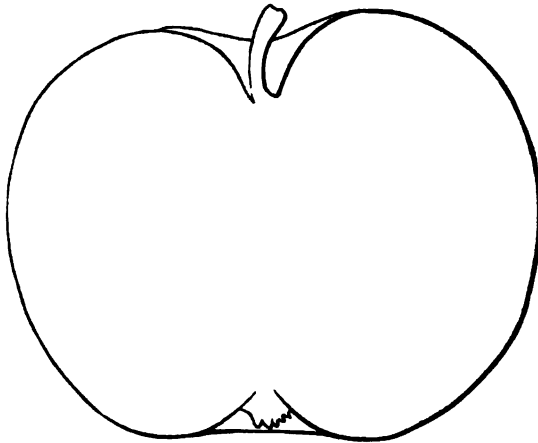


Fig. 11. Early Harvest.

yellow skin, a crisp and tender flesh, and combines, in its flavor, that pleasant admixture of sweet and acid, which gives it a freshness peculiar among early apples. Though of American origin, and fully described by *Coxe*, in his excellent work, under the names above quoted, it is yet far from being common in collections in the vicinity of Boston, and is so scantily

supplied in our markets, that fine specimens always command a very high price. No collection of early apples should be without this fine variety.

The Early Harvest is of vigorous growth, branching rather low, and forming a compact head; with erect, rather stout annual shoots, and, in young trees, the fruit is usually produced on the ends of the branches. With good cultivation, the trees bear fine crops of very handsome fruit.

Size, medium, about three inches broad, and two and a half deep: *Form*, roundish, slightly angular, and full at the crown: *Skin*, fair, smooth, pale yellow or straw-color when mature, very slightly tinged with blush on the sunny side, with a few traces of russet around the stem, and some scattered spots of the same color, intermixed with white specks, over the surface: *Stem*, medium length, about three quarters of an inch long, rather slender, and inserted in a moderately deep and somewhat narrow cavity: *Eye*, medium size, closed, and slightly sunk in a shallow, nearly smooth, basin: *Flesh*, white, rather fine, crisp and tender: *Juice*, abundant, pleasantly acid, sprightly, and well-flavored: *Core*, rather close: *Seeds*, small. Ripe from the middle of July to the end of August.

XIV. PORTER. *American Orchardist.*

The Porter, (*fig. 12,*) must, without doubt, be ranked at the head of our fall apples. It comes into fruit just after the Williams, and, though not so showy as the latter fruit, its fine yellow skin, tinged with a shade of pale blush, places it among our handsomest apples. In sprightliness of flavor, it is scarcely equalled by any other fall variety.

The Porter originated in Sherburne, on the grounds of the Rev. Samuel Porter, about fifty years ago, and remained unnoticed in his orchard for some years. Mr. Sanger, a near neighbor, passing through it one day, had his attention attracted to the apple, from some very handsome specimens which fell from the tree, and, calling upon the owner, apprized him of the valuable fruit he had upon his grounds, at the same time requesting some scions. Mr. Porter, then somewhat advanced in life, and not seeming to be aware of its excellence, replied, "that he might have the whole tree if he

wished." Mr. Sanger was content, however, to possess the scions, and, from that period, the Porter grew rapidly in favor, and no orchard could be considered complete without it. The tree is of vigorous and upright habit, though of rather slow growth, making short-jointed wood, and forming a low spreading head. It is also very productive, and the fruit remarkably fair.

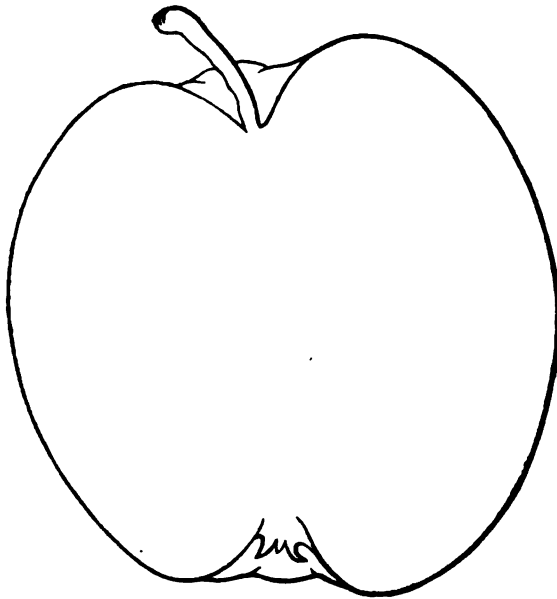


Fig. 12. Porter.

Size, large, about two and a half inches broad, and three deep : *Form*, oblong, largest about one third from the stem, little flattened at the base, narrowing to the crown, which is slightly oblique, and somewhat ribbed : *Skin*, fair, smooth, clear bright yellow, faintly striped and marbled with a dull blush on the sunny side, and marked with a few crimson dots : *Stem*, rather short, about three quarters of an inch long, slender, curved, and inserted in an open, broad, and not very deep cavity : *Eye*, rather large, open, and sunk in a moderately deep ribbed hollow ; segments of the calyx long, regularly formed, and reflexed at the ends : *Flesh*, yellowish, fine, crisp

and tender: *Juice* abundant, rich, subacid, very sprightly and high flavored: *Core*, medium size, slightly open: *Seeds*, rather large, acutely pointed. Ripe in September and October.

XV. WILLIAMS. *American Orchardist.*

Williams's Favorite. *Fruits and Fruit Trees of America.*

Williams's Favorite Red. *Book of Fruits*, 1st Ed..

Williams's Early, of some collections.

The Williams apple, (fig. 13,) is, perhaps, next to the Red Astrachan, the most beautiful of our summer varieties. The

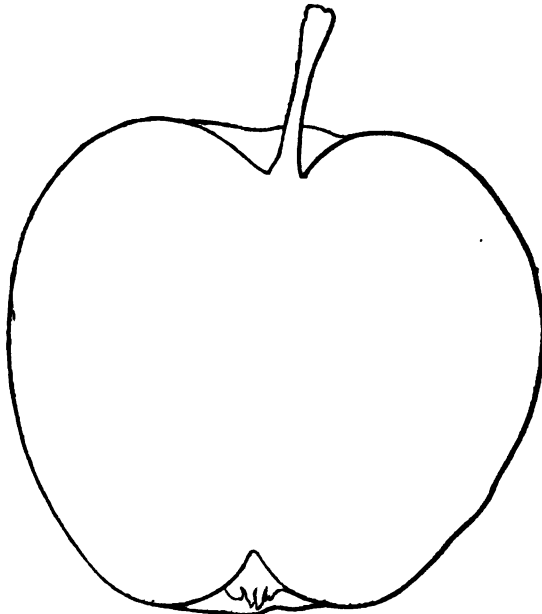


Fig. 13. Williams.

skin is of the deepest crimson hue, over a paler ground, and possesses a remarkably smooth and glossy surface. It is also of large size, and of superior flavor.

The Williams originated in that part of Roxbury formerly called Canterbury, upon the farm of Mr. Benjamin Williams, who purchased the land on which it grew nearly a century ago. At an advanced age, high winds partially destroyed the tree, and it was subsequently cut down. Previously, how-

ever, scions had been taken off by Mr. Williams, and grafted into other trees. It was introduced to notice by Mr. Downer, of Dorchester, who exhibited specimens in 1830, before the Mass. Hort. Society, and they gave it the name of Williams. It was previously known in the market under the name of Queen and Ladies' apple, and was one of the most favorite summer varieties. Since then its cultivation has greatly increased, and the market is now supplied in considerable quantities, though not to so great an extent as the demand. The tree is of vigorous and upright growth, and forms a round head; it is also a productive variety, but, to have large and very fine specimens, a rich soil and good cultivation are requisite.

Size, large, about two and three quarters inches broad, and two and a half deep: *Form*, oblong, with some uneven ridges around the base, and narrowing towards the eye: *Skin*, fair, smooth, shining, of a brilliant crimson, covered with very indistinct stripes and mottlings of a darker shade: *Stem*, medium length, about one inch long, moderately stout, straight, swollen at the base, and obliquely inserted in a rather shallow broad cavity: *Eye*, medium size, closed, and little depressed in a small, abruptly sunk, and rather shallow basin: *Flesh*, yellow, rather coarse, somewhat crisp and tender: *Juice*, abundant, rich, pleasantly acid, and fine flavored: *Core*, large, rather close: *Seeds*, large, very long, and pointed. Ripe from the beginning of August to the middle of September.

ART. V. *On the Cultivation of Epiphyllum Russellianum and other Cacti; with a short notice of a new variety of Cabbage.* By J. E. TESCHEMACHER.

I observe, in your last number, an inquiry respecting the cultivation of *Epiphyllum Russellianum*, the most beautiful of the tribe. Having been very successful in my efforts with the cactus family, I will give you an account of my usual method of cultivation, and then state how I have succeeded in producing from twenty to twenty-five blossoms on a small plant of *E. Russellianum*. As a proof, however, of general success, I may mention that the plant of *Echinocactus Eyriesii*,

exhibited last summer at the Hall of the Mass. Hort. Society, with eleven buds and blossoms, has now thirty buds, and, from the strength of the plant, they will probably all come to perfection; my own beautiful seedling between *C. speciosissimus* and *Ackermanni* seems pushing out buds from almost every notch. *E. truncatum*, long since out of blossom, was a complete mass of flowers.

The first requisite is complete drainage of the pot; with the soil, which should rather be rich than poor, mix a *little* powdered charcoal, and some, not much, old lime rubbish. I think this latter useful, as my cultivation depends mainly on Guano water, from which the lime sets the ammonia at liberty, while the charcoal absorbs, (stores up), and thus prevents the loss of what is not immediately used by the plant. The chief principles after this are to keep the plants warm, with as much light as possible, but nearly altogether dry during their hybernation or period of rest, and to water them plentifully, during their period of growth and flowering, with Guano water; when the flowers begin to fade, then commence by degrees withholding water. For instance, *Epiphyllum truncatum* finished blooming the end of January, its period of rest begins, it is now quite dry, and hangs up close under the glass; in this state, the thermometer occasionally at 38 Fah. does not injure it. Thus it will remain until the end of March, when it will receive plentiful watering once a week only. About the middle or end of April, it will swell up, and in a fortnight or three weeks from that time, young leaves will appear; then I shall begin with Guano water, twice or three times a week; the phyllous stems will soon become large, and dark green; should the Guano stimulate a second crop of these, pick them off without mercy; towards winter again water will be given sparingly till the buds appear. I have not changed the soil of my Cacti for three years. This plan is pursued with all. With respect to *E. Russellianum*, now in fine bloom with me, I observed, at the period of the first appearance of the buds, that a number of the phyllous stems pushed forth their little red noses, not only from the terminal stem but also below: these were immediately pinched clean out with the finger and thumb nail; in many cases flower buds sprang out near the same spot.

The cultivation of this tribe of plants is attended with many conveniences.—They will thrive luxuriantly where there is not air enough for many of the woody and shrubby plants to flourish, and the most disagreeable of all things to a horticulturist is a dwindling, half-starved vegetation; they will bear alternate heat and cold during their period of rest, which by management may be made to occur chiefly in the winter; their blossoms, though fleeting, are generally beautiful, often very fragrant, and their forms, if not elegant, are very curious and interesting.

While writing, permit me to touch on a very different subject. Last spring, Mr. H. Colman sent me from Paris a small quantity of cabbage seed, labelled: "given me as seed of a most extraordinary cabbage.—I have not seen it." This seed I distributed amongst many of my friends, and sowed some myself. When it first came up, the seedlings so much resembled those of the Couvé tranchuda sowed in an adjoining patch, that I could not then tell the difference. The result is as follows. The cabbage is of the pine apple form, weighs from six to twelve or fifteen lbs. each, is the purest and sweetest vegetable of the tribe, and not a single plant of all mine, or those of my friends, failed forming fine, hard, solid heads.

One plant, of which the head was broken off soon after planting out, sent forth four shoots, each of which formed a fine solid head; the four weighed $12\frac{1}{2}$ pounds. Mr. L. Stone, of Watertown, to whom I gave some seed, exhibited this cabbage at the Annual Exhibition of our Horticultural Society, and he was kind enough to distribute plants all around, last autumn, for the purpose of being kept through the winter for seeding the approaching summer, so that I hope we shall have plenty of seed for next season. It seems to me highly probable that it will take the place of the large drumhead, as four or five of these will grow in the same space as is required for two of the others; add to this, that the flavor is far superior, and the faculty of heading well, unfailing.

Although I have no name for it, I think it very probable that it is the Pomeranian Cabbage, mentioned in one of your volumes, probably 1842 or 1844, as having been just introduced into England or Scotland, where it met with much

commendation. Perhaps you can refer to it more readily than I can.

Feb. 21st, 1848.

Our thanks are due to Mr. Teschemacher for his reply to the query of our correspondent, in regard to the management of that beautiful plant, the *Epiphyllum Russellianum*. Few of the Cacti deserve so much at the cultivator's hands as this brilliant species, and all lovers of the family must be highly gratified to learn the routine adopted by Mr. Teschemacher to produce such excellent results, not only with this species, but with others, more particularly the too much neglected, but lovely *Echinocactus Eyrièsii*, a plant which is so admirably adapted to parlor cultivation, that every body should possess it. Mr. Teschemacher has paid a just tribute to the merits of the Cacti. Flourishing as they will, where most plants present only a "half-starved vegetation",—they present the strongest claims to the attention of all who love window gardens, and who love to see a thriving vegetation, though it be in the singular or grotesque form of the Cacti tribe.

We are glad our correspondent has alluded to the new variety of cabbage introduced by Mr. Colman; a few heads were given to us last fall by Mr. L. Stone, and we were struck with their peculiar pointed and sugar-loaf form. Upon receiving the above, we immediately turned to our volume where the Pomeranian Cabbage is noticed (X. p. 98), and we have no doubt it is the same variety. So delicious a vegetable is deserving of extensive cultivation, and the testimony of Mr. Teschemacher to its excellence, is sufficient to recommend it to all cultivators.—*Ed.*

MISCELLANEOUS INTELLIGENCE.

ART. I. General Notices.

On the Art of Hybridizing Flowers.—Although hybridizing, as an art, be of recent date, there is not the least doubt but that Nature herself practised it from time immemorial, the agents employed for the purpose being winds and insects, and, of the latter, more particularly the bee. But he stated

that Nature, in her wisdom, had not only set bounds to the admixture of species, but she had also set up other barriers almost as insurmountable as the mixing of species themselves, for we find that a perfect hybrid, both in the animal and vegetable kingdom, is almost always incapable of propagating itself by natural means. In the animal kingdom, the mule is a striking instance; and, in the vegetable kingdom, it is only by again crossing the true hybrid by one of its own parents that we can expect success, and, after we have succeeded, the general tendency of the progeny is to return to one or other of the original parents. Thus it requires all the vigilance of the cultivator to mark, seize, and act upon every variation, however slight, that may present itself to his observation. After various allusions to the admixture of species in the animal kingdom, Mr. K. proceeded to state that, in vegetables, Brassicas freely mix with Brassicas in all their gradations. But who would think of crossing a cabbage with an oak! The general rule is, that plants only which are nearly related are capable of producing crosses. There are some exceptions, however, to this rule, for the beautiful pelargoniums and the scarlet geranium, though nearly allied, he had not been able to mix. Again, the raspberry and strawberry are first cousins; yet, after several attempts, they have not hybridized. The gooseberry and the currant are nearly related; yet their alliance seems invincible, though tried by skilful hands. Mr. K. then commented on the mixture of herbaceous and shrubby species of plants, particularly calceolarias and semi-herbaceous fuchsias. After alluding to the improvements that might be effected in culinary vegetables and fruits by hybridizing, he proceeded to state that, although hybridizing had already produced important results, there is no telling what might yet be produced by the skilful application of the means which Nature has put into our hands. The existence of sexes in plants is now acknowledged by all, and hybridizing, as well as cross-breeding, is generally performed in the following manner:—Carefully select parents possessing the nearest approach to the properties desired, place them apart from plants of their kind, and pay particular attention to their cultivation, in order to obtain a healthy fructification. It may be discretionary which to select as the male and female; by all that is known, the progeny will take more after the males. When the plants are in flower, carefully extract the anthers from the flower you intend should produce seed, before they arrive at maturity, or your attempts will be of no avail; for Nature will have performed her part, and, instead of a hybrid, you will have a natural progeny. After extracting the anthers from the flower you wish to bear the seed, carefully watch the progress of the stigma, and, as soon as you find it in a condition to receive the pollen, choose the matured anthers, and bring them in gentle contact with the stigma, to which sufficient pollen will adhere. In some plants, there is no difficulty in ascertaining the precise time, when the stigma is ready to receive the pollen, such are pelargoniums, the stigma in which, until perfectly matured, is closed, and, if not watched at its expansion, and fertilized, abortion will follow. It must be borne in mind that the stigma once fertilized is sufficient. Insects and strong currents of air should be excluded whilst plants for hybridizing are in flower. Mr. Beck, and

other good growers, practise this plan by covering the places through which air is admitted with very fine gauze. Mr. K. admitted that most of the approved pelargoniums, fuchsias, &c., were not strictly hybrids, but crosses of hybrids. Ornamental flowers and plants, when long and highly cultivated (continued Mr. Kendall,) have a tendency to acquire a size and conformation of parts widely different from their natural state. The judicious cultivator will seize upon these indications, and perpetuate them. That plants and flowers are much affected by seasons is evident from the fact that some plants produce double, semi-double, and single flowers alternately. Color is also much affected by the same influences. Florists are opposed to the late Mr. Knight in their practice; for they recommend the weakest plants, and those that germinate last, to be taken the greatest care of, as they are sure to produce the most valuable flowers. Now both are right; for, when a good fruit or vegetable is wanted, natural vigor is most requisite; but, in a florist's flower, where chastity of form and beautiful marking are required, the weakest plants will be the most likely to produce the best, for they are evidently the production of Nature's weakest powers.—(*Gard. Chron.*, 1848, p. 6.)

ART. II. *Domestic Notices.*

Mr. Beck's special prizes for Pelargoniums.—By a reference to the proceedings of the Mass. Horticultural Society, in another page, it will be seen, that, in addition to the society's premiums for Pelargoniums, two liberal prizes are offered by Mr. Beck, the celebrated amateur cultivator of this beautiful family, for superior specimens of the newest varieties. We trust this offer may induce all amateurs, as well as professional gardeners, to compete for these prizes, and thus be the means of elevating the taste for the pelargonium, certainly among the richest of our greenhouse and parlor plants.—*Ed.*

The Red Canada Apple.—In our last volume, we described the Red Canada apple, as a newly introduced variety; superior specimens had been sent to us two years in succession, and of such surpassing beauty, and with so many encomiums regarding its quality, that we gave a description of it, accompanied with an outline figure. It appeared to us a familiar flavored apple, but the fact that it had been received from Canada, at once appeared to decide any doubts about its being synonymous with any thing we had in our vicinity. We have been somewhat surprised therefore, to learn, from those who have compared this apple with the *old* Nonesuch, that the two are identical. This opportunity we have not had ourself; but as soon as we have both fruits before us to make certain, we shall mention it again. Relying, however, upon the good judgment of those who made the statement, that they are so, cultivators will be careful in regard to adding the Red Canada to their collections, as a new apple. We hope our correspondents, Messrs. Bissell and Sibley, of Rochester, who forwarded us beautiful

specimens, will let us know their opinion, in regard to the identity of the two apples.—*Ed.*

Albany and Rensselaer Horticultural Society. Winter Meeting of Members. Albany, Feb. 11th, 1848.—The Society met at the Agricultural rooms pursuant to notice,—V. P. Douw, one of the Vice Presidents of the Society, in the chair. Dr. Herman Wendell, from the committee chosen at the last meeting to prepare a premium list for 1848, reported a list, which was adopted, and will be published hereafter. After various amendments were made to the rules, and notices of intended alterations to the Constitution given, the following gentlemen were, on motion, appointed by the chair, a committee to report a list of officers and committees for 1848 to the Society at the May meeting, viz.: E. P. Prentice, V. P. Douw, Herman Wendell, Dr. Thomas Vail, Amos Briggs, Wm. Buswell, and Wm. Newcomb. On motion of Wm. Buswell of Rensselaer, and seconded by Wm. Newcomb, the following Pomological Rules were adopted by the Society, and substituted for those heretofore adopted, viz.:

[These rules are precisely the same as those adopted by the New York State Agricultural Society, and already laid before our readers at p. 67.—*Ed.*]

The Committee on Fruits reported that there was exhibited, by Dr. J. P. Beekman, of Kinderhook, Columbia County, beautiful specimens of Swaar and Newtown Pippin Apples. By Thomas M. Burt, of Kinderhook, Esopus Spitzemberg, and Swaar apples. By Henry Snyder, nurseryman, of Kinderhook, beautiful Roxbury Russet, Vandervere, Lady apples, and Seedling Winter pears. By Peter Kingman, of Kinderhook, Bristol Apples, a good and handsome sweet apple. By Albert Martin, of Schaghticoke, per Amos Briggs, Swaar and Blue Pearmain apples. By Joseph Mosher, per Amos Briggs, Scolloped or German Gilliflower apples, very fine. By Roswell S. Brown, per Amos Briggs, Westfield Seek-no-further apples. By Julius Rhodes, of Albany, Northern Spy apples from the Chapin orchard in Ontario County. By E. C. Frost, of Catherine Chemung Co., a nurseryman, Winter King apples, a beautiful and good late winter fruit. By Dr. Herman Wendell, of Albany, Newtown Pippin, and Pomme de Charles, or Male Carle apples; Easter Beurré, Inconnue of Van Mons, and Prince's St. Germain pears. By Wm. Newcomb, of Pittstown, Roxbury Russet, Westfield Seek-no-further, Rhode Island Greening, Blue Pearmain, Fall Greening, 1 Pound Sweet, Black Gilliflower, Esopus Spitzemberg, Red Gilliflowers, and two seedlings.

The Committee awarded the premium for Winter Pears, to Dr. Herman Wendell, \$3.

The first premium for Winter Apples, to Wm. Newcomb, \$3.

The second for Winter Apples, to Dr. Herman Wendell, \$2.

The Committee beg leave to recommend that the thanks of the Society be tendered to Dr. Beekman, Thomas M. Burt, Henry Snyder, and Peter Kingman, of Columbia County, and also to E. C. Frost, of Chemung County, and to the gentlemen from Schaghticoke, for their contribution to the exhibition. For the Committee, V. P. Douw.

The Committee on Floral Designs, Bouquets, &c., reported that the

President of the Society, Col. Joel Rathbone, exhibited three beautiful bouquets, composed of choice greenhouse flowers, and arranged with good taste by his gardener, John Sloan, to whom they have awarded the premium of \$2. The Committee regret that the extreme cold weather,—the mercury being below 0° of Fahrenheit—prevented greater competition. For the Committee. *Herman Wendell.*

The Committee on Greenhouse Flowers reported that Mr. James Wilson exhibited the following named beautiful *Camellia Japonicas*, viz. :—*Chandlerii*, *Queen Victoria*, *Donckelaërii*, *Saccoi magnifique*, *Sesangua rosea*, *amabilis*, *Prattii*, *candidissima*, *Henri Favre*, *Sarah Frost*, *Marchioness of Exeter*, *Double white*, *carnea*, *Carswelliana*, *Gunnelliana*, *Sherwoodii*, *Rose pleno*, *William the Fourth*, *imbricata*, *Double striped*, and *elata*, *Ericas*, *transparens* and *Bowieana*, *Eschynanthus grandiflora*, *Poinsettia pulcherrimum*, twenty varieties of beautiful Pansies, Chinese Primroses, &c. &c.

The Committee awarded the premium of \$3 00 for the best six *Camellias*, to Mr. Wilson—for varieties : *fimbriata*, *Carswelliana*, *Sarah Frost*, *imbricata*, *Gunnelliana*, and *candidissima*.—They awarded the premium of \$2 00 for the second best six, to Mr. Wilson—for varieties : *amabilis*, *Henri Favre*, *Saccoi magnifique*, *William the Fourth*, *Double white*, *Queen Victoria*. And they also awarded a premium of \$2 00 to Mr. Wilson, for his beautiful display of Pansies. For the Com., *Wm. Newcomb*.

The Committee on discretionary premiums reported that there was exhibited by Col. Rathbone, three bunches of *Asparagus*, evincing great skill in his gardener, John Sloan, to whom they have awarded a premium of \$2 00. For the Committee, *J. Mc D. Mc Intyre*.

B. P. JOHNSON, SECRETARY, *Albany*, Feb. 11, 1848.

ART. III. *Pennsylvania Horticultural Society.*

This Society held its Nineteenth Annual Exhibition, on the fifteenth, sixteenth, and seventeenth, of Sept. last, and the report which has been sent to us, fills a pamphlet of nearly fifty pages. We therefore, are only enabled to give a very brief account of it, for want of room.

An immense number of plants in pots, were exhibited by various amateurs and nurserymen; the floral designs, bouquets, &c., were very numerous and attractive; and the fruits, especially the grapes, were superior to those of previous years; the vegetables were also exhibited in liberal quantities, and of fine quality.

Premiums for the best *foreign* grapes, under glass, were awarded to Wm. Sinton, gardener to George W. Carpenter, for the best collection, and to R. S. Field, Princeton, N. J., for the second best.

For the best and most numerous collection of named varieties of pears, to J. Rutter, West Chester, Pa.

For the best twenty blooms of named varieties of Dahlias, to G. Schmitz ; also for the second best, and the best American seedling.

Delegations were appointed to attend the annual exhibitions of various societies in different sections of this country, and the reports of the delegations fill several pages. But we have only room to notice one of them. The delegation to the Massachusetts Horticultural Society, was composed of Dr. Brinckle, and T. McEuen, and the following is an abstract of their report.

"The delegation to the Exhibition of the Massachusetts Horticultural Society beg leave to report, that they attended the Annual Exhibition of that Society, which was held at their Hall in Boston, on the 22d, 23d and 24th inst.

High as our expectations had been raised, in regard to this Exhibition, they fell far short of the reality. But the Fruit department more especially excited our admiration.

Of Apples, there was a rich display, embracing many kinds not usually met with in the vicinity of Philadelphia : such as Corse's St. Lawrence, French's Sweet, Bourrassa, Murphy, Fearn's Pippin, Minister, Beauty of Kent, Spice, Garden Royal, Pumpkin Sweet, Marigold, Smith's Fine Table, Seaver's Sweet, Hubbardston Nonsuch, York Russet, Lyscom, Perry's Winter Sweet, Fameuse, Chestnut, Blenheim Pippin, Walpole, Ribstone Pippin, Ross' Nonpareil, Reinette du Canada, &c.

As to Pears, there probably never was, at any period, or in any country, a finer collection exhibited. From the garden of the President, we noticed about 160 varieties, of beautiful appearance, and of great excellence. Messrs. French, Walker, Newhall, Macondry, Hovey, Manning, Lovitt, Johnson, Cabot, and many other individuals also, contributed extensive collections of rare and valuable kinds.

We were not a little gratified at seeing, on the tables, specimens of so many of our *native* Pears. Among these were the Pratt, Knight's Seedling, Johonnot, Dearborn's Seedling, Seckel, Andrews, Buffam, Fulton, Heathcote, Washington, Wilkinson, Dix, Williams' Early, Rapelje's Seedling, Chelmsford, and Cushing. Most of these are of Eastern origin, and of great merit ; comparing most favorably with the celebrated varieties recently imported from England, France and Belgium. We were more especially pleased with the delicious flavor and superior excellence of the Pratt, Andrews, Johonnot, and Knight's Seedling. The beautiful specimens of the Washington, grown on the Quince, from the garden of Capt. Macondry, also particularly attracted our notice.

The Grapes, as might be expected, excited much admiration. The size and beauty of the specimens of this luscious fruit, indicated the great perfection at which our Boston friends have arrived, in its cultivation. Among the many choice varieties exhibited, we noticed the Victoria, Black Prince, several varieties of the Black Hamburg, the Cannon Hall Muscat, Black Lombardy, Muscat of Alexandria, Chasselas de Fontainebleau, Frankendale, Esperione, Grizzly Frontignac, Syrian, St. Peter's, White Tokay, Zinfindal, etc.

But, though the greatest charm of the Exhibition consisted in the magnifi-

cent display of Fruit, we cannot omit to notice, in terms of high commendation, the Floral department: Dahlias, Japan Lilies, German Asters, and other flowers of exquisite beauty and brilliant hues, were in great abundance, imparting gayety and animation to the scene. The wreaths, festoons, and other decorations, were tasteful and effective; and indeed, in all its departments, the Exhibition was such as to do great credit to the Committee of Arrangement, and add to the renown of this far-famed Society.

Though at a loss how to compress within the limits of a Report, the many matters of interest offered to our notice in this visit, there is one other of too great importance, in its practical bearings, to be omitted; we refer to the examination of the new or little known varieties of fruit displayed on the occasion. This examination took place on the last day of the Exhibition, and in the Library-room of the Society. There, were assembled, the Fruit Committee, with the President of the Society, and, by invitation, the delegates from six or eight Horticultural Institutions, together with several other distinguished Pomologists. The fruit alluded to was submitted to the inspection of the gentlemen present, and at the same time, the circumstances connected with its introduction or discovery were made known; the fruit was then tasted, and a record made of the observations. The result of the examination would sometimes warrant a decision that might be considered final. In this manner, the merits of the fruit in question were tested by a number of well qualified persons, whose appreciation could scarcely fail of being just; thereby tending to a rapid dissemination of the valuable sorts, the rejection of the inferior, and the lessening of disappointment that too often falls to the lot of the Horticulturist.

In conclusion, we beg leave publicly to express our warm and grateful acknowledgments to the Massachusetts Horticultural Society, for the cordial welcome with which we were greeted on our arrival—the kind and unremitting attentions we received during our stay—and the facilities, so generously afforded us, for visiting the princely gardens in the vicinity of their enchanting city.’’ *Report*, pp. 602—605.

ART. IV. *Massachusetts Horticultural Society.*

Saturday, January 8th, 1848.—An adjourned meeting of the Society was held to-day,—the President in the Chair.

The Secretary being absent, Mr. C. M. Hovey was appointed Secretary *pro tem*.

The Finance Committee submitted the Annual Report, which is subjoined.

The Committee of Finance, having examined the accounts of the Treasurer, respectfully submit the enclosed Statements of Receipts, Expenditures, and Investments of the Society, from which it appears that the Receipts have been seven thousand six hundred and thirty-three dollars and sixty-seven cents, including the balance of fifty-nine dollars and fifty-eight

cents in the Treasurer's hands at the commencement of the year, as per Statement marked A.

That the Expenditures and Investments during the year have been seven thousand five hundred and eighty-six dollars and thirty-two cents, leaving a balance in the Treasurer's hands, on the 31st Dec. 1847, of forty-seven dollars and thirty-five cents, as per Statement B.

That the Real Estate and personal property of the Society, as valued in the Schedule annexed, marked C, amounts to forty-five thousand and ninety-three dollars and fifty cents.

STATEMENT A.

Receipts from January 1st to December 1st, 1847.

Balance in the Treasury January 1st,	\$ 59 58
Cash of Geo. Bond, Esq., Treasurer of Mount Auburn,	3,233 41
Rent and Taxes of Store,	1,090 00
Rent and Taxes of Hall,	350 00
Donation by Josiah Bradlee, Esq.,	500 00
Admission fee—assessments,	1,356 00
Weekly Exhibition,	183 83
Annual Exhibition,	560 86
	<hr/>
	749 69
Dividends,	294 99
	<hr/>
	\$7,633 67

STATEMENT B.

Paid investment of Bradlee Fund,	\$ 500 00
“ insurance for 1847 and 1848, two years,	115 00
“ premiums,	1,241 00
“ for rail-road stock,	2,458 50
“ taxes,	180 00
“ for Library,	141 00
“ interest,	750 00
“ Doorkeeper, and care of Hall,	444 72
“ on account of Transactions,	450 00
“ J. B. Hancock,	160 75
“ for repairs,	238 13
“ for printing and advertising,	409 73
“ for diplomas,	43 50
“ for gas,	54 00
“ miscellaneous expenses,	399 99
Balance in the hands of the Treasurer, December 31st, 1847,	47 45
	<hr/>
	\$7,633 67

C. SCHEDULE

Of the Property of the Massachusetts Horticultural Society, viz. :—

Horticultural Hall in School Street, valued at	\$36,000 00
Three chandeliers in said Hall,	390 00
Two marble vases,	95 00
Two Bradlee vases,	150 00
Glass and other ware,	900 00
Library,	1,300 00
Furniture and safe,	300 00
Appleton Fund,	1,000 00
Lyman Fund,	1,000 00
Lowell Fund,	1,000 00
Bradlee Fund,	600 00
Twenty-two shares Boston and Worcester Rail-road stock at cost, 2,458 50	
	<hr/>
	\$ 45,093 50

The only debt of the Society known to the Committee is a note secured by mortgage on the real estate for fifteen thousand dollars, dated 18th May, 1844, payable in five years with interest, at the rate of five per cent. per annum half yearly: but it is understood that there are claims against the Society for unliquidated accounts for premiums awarded but not paid—printing, dies for medals, alterations of the Hall, painting, &c. &c., amounting to about \$2,000. [Signed.]

The same committee also reported, that the certificate of the Bradlee Fund, invested in the Massachusetts Hospital Life Insurance Company, had been passed to the Treasurer.

The Special Committee, appointed to settle with the Treasurer of the Mount Auburn Cemetery, reported that they had attended to that duty, and received the sum of \$3,500, and that a final settlement would be made on the third Monday of the month, when a further amount might be expected.

It was *Voted*, That the Finance Committee invest the sum of \$2,000 towards paying off the mortgage of the Society's Building.

Mr. C. M. Hovey, Chairman of the Library Committee, submitted the Annual Report, which was accepted, and passed to the Executive Committee to fill the blank appropriation asked for, with such a sum as the Finances of the Society will admit of.

The Executive Committee reported the list of premiums offered for the year 1848, with a revised Code of Regulations, which was accepted.

Ordered, That the list of premiums awarded for 1847, and those offered for 1848, be printed and laid upon the table for distribution at the next meeting.

Adjourned four weeks to February 5th.

The following Lists of Premiums for 1848 were reported by the Committee for establishing Premiums, and approved by the Executive Committee :—

The Committee for establishing Premiums respectfully submit and recommend the following Schedule of Premiums for the year 1848. By order,
S. Walker, Chairman.

LIST OF PREMIUMS FOR 1848.

PROSPECTIVE PREMIUMS.

For objects to be originated subsequent to A. D. 1846, and which, after a trial of five years, shall be deemed equal, or superior, in quality, and other characteristics, to any now extant.

For the best Seedling Pear, the Society's large Gold Medal, valued at	\$ 60 00
For the best seedling Apple, the Society's large Gold Medal,	60 00
For the best Seedling Hardy Grape, the Society's large Gold Medal,	60 00
For the best Seedling Plum, the Appleton Gold Medal,	40 00
For the best Seedling Cherry, the Lowell Gold Medal,	40 00
For the best Seedling Strawberry, the Lyman Plate,	50 00
For the best Seedling Raspberry, the Bradlee Plate,	40 00
For the best Seedling Hardy Rose, the Society's large Gold Medal,	60 00
For the best Seedling Camellia Japonica, the Society's large Gold Medal,	60 00
For the best Seedling Azalea Indica, the Lowell Gold Medal,	40 00
For the best Seedling Tree Pæonia, the Appleton Gold Medal,	40 00
For the best Seedling Herbaceous Pæonia, the Lowell Gold Medal,	40 00
For the best Seedling Potato, the Society's large Gold Medal,	60 00

SPECIAL PRIZE LIST FOR PELARGONIUMS,

TO BE AWARDED AT THE EXHIBITION FIRST SATURDAY IN MAY.

For the best <i>six</i> dissimilar varieties, cultivated with superior skill, in <i>eight</i> inch pots, open to all competitors, £5,	25 00
For the second best <i>six</i> dissimilar varieties, cultivated with superior skill in <i>eight</i> inch pots, open to all competitors, £2,	10 00

The above liberal prizes are offered by E. Beck, Esq., of Isleworth, near London, a Corresponding Member of the Society.

SPECIAL PRIZE LIST OF FRUITS.

TO BE AWARDED IN THE YEAR 1848, VIZ.: TWENTY PRIZES OF FIVE DOLLARS EACH.

- 3 prizes for the two best varieties and specimens of Summer Apples.
- 2 prizes for the two best varieties and specimens of Autumn Apples.

- 2 prizes for the two best varieties and specimens of Winter Apples.
- 2 prizes for the two best varieties and specimens of Summer Pears.
- 2 prizes for the two best varieties and specimens of Autumn Pears.
- 2 prizes for the two best varieties and specimens of Winter Pears.
- 3 prizes for the best varieties of Cherries.
- 2 prizes for the best varieties of Plums.
- 3 prizes for the best varieties of Peaches.

—
20 prizes, at \$ 5 each, = \$ 100.

The specimens presented for the above prizes shall consist of not less than three specimens of each variety of Apples, Pears, and Peaches; not less than one dozen Plums, and two dozen Cherries; all of which shall be at the disposal of the Committee on Fruits.

PREMIUMS FOR FRUITS.

Amount appropriated, Four Hundred and Fifty Dollars.

For the best and most interesting exhibition of Fruits, during the season, the Lowell Medal or Plate, valued at . . .	\$ 25 00
For the next best, the Bradlee Plate, valued at . . .	15 00

TO BE AWARDED AT THE ANNUAL EXHIBITION IN SEPTEMBER.

APPLES. —For the best twelve varieties, of twelve specimens each,	
a premium of the Society's Plate, valued at . . .	25 00
For the second best twelve varieties, of twelve specimens each,	
a premium of the Appleton Silver Gilt Medal, . . .	10 00
For the third best twelve varieties, of twelve specimens each,	
	5 00
PEARS. —For the best twelve varieties, of twelve specimens each,	
a premium of the Lyman Plate, valued at . . .	25 00
For the second best twelve varieties, of twelve specimens each,	
a premium of the Lowell Silver Gilt Medal, . . .	10 00
For the third best twelve varieties, of twelve specimens each,	
	5 00
GRAPES. —For the best <i>five</i> varieties, two bunches each, the Lyman Plate, . . .	
	15 00
For the best <i>three</i> varieties, two bunches each, the Bradlee Plate,	
	10 00
For the best <i>two</i> varieties, two bunches each, . . .	
	7 00
For the best <i>one</i> variety, two bunches, . . .	
	5 00
ASSORTED FRUIT. —For the best basket of Fruit, of various kinds,	
	10 00
For the next best, 2d premium of . . .	
	7 00
For the next best, 3d premium of . . .	
	5 00
For the best dish of Apples, not less than twelve specimens of one variety, a premium of . . .	
	6 00
For the second best, a premium of . . .	
	4 00
For the best dish of Pears, not less than twelve specimens of one variety, a premium of . . .	
	6 00 .

For the next best, a premium of \$4 00
 Assorted fruits in baskets shall not be entitled to any other than
 the premium for such.

☞ *The above premiums to be awarded on the first day of the Exhibition.*

PREMIUMS DURING THE SEASON.

APPLES.—For the best Summer Apples, on or before the 1st Sept.	6 00
For the next best, a premium of	4 00
For the best Fall Apples, on or before the 1st of Dec.	6 00
For the next best, a premium of	4 00
For the best Winter Apples, on or before the 3d Sat. in Dec.	6 00
For the next best, a premium of	4 00
PEARS.—For the best collection of new Pears, not exhibited before this year, a premium of the Society's Silver Gilt Medal,	15 00
For the next best,	10 00
For the best Summer Pears, on or before the 1st Sept.	6 05
For the next best, a premium of	4 00
For the best Fall Pears, on or before the 1st Dec.	6 00
For the next best, a premium of	4 00
For the best Winter Pears, on or before the 3d Sat. in Dec.	10 00
For the next best, a premium of	6 00
CHERRIES.—For the best specimen, not less than two quarts,	6 00
For the second best, a premium of	4 00
PEACHES.—For the best specimens grown under glass previous to July 15, a premium of	6 00
For the second best, a premium of	4 00
For the best specimen grown in open culture,	6 00
For the second best, a premium of	4 00
NECTARINES.—For the best specimen of Nectarines,	6 00
For the second best do., a premium of	4 00
QUINCES.—For the best specimens of the best kind of quinces,	5 00
For the second best, a premium of	3 00
PLUMS.—For the best Plums, of the <i>best flavor</i> , not less than 2 qts,	6 00
For the next best do., a premium of	3 00
GOOSEBERRIES.—For the best flavored and finest specimens, two boxes,	5 00
For the second best, a premium of	3 00
CURRENTS.—For the best flavored and finest specimens, two boxes,	5 00
For the second best, a premium of	3 00
RASPBERRIES.—For the best specimens of Raspberries, not less than two boxes,	5 00
For the second best, a premium of	3 00
BLACKBERRIES.—For the best specimens of Blackberries, not less than two boxes, a premium of	5 00
For the second best, a premium of	3 00
STRAWBERRIES.—For the best specimens of Strawberries, not less than two boxes, a premium of	6 00

For the second best, a premium of	\$4 00
For the third best, a premium of	3 00
MUSK MELON.—For the best Musk Melon, a premium of	5 00
For the second best, a premium of	3 00
FIGS.—For the best specimen of Figs, a premium of	5 00
For the second best, a premium of	3 00
GRAPES.—For the best specimens and the best varieties of Grapes, grown under glass previous to July 1st,	10 00
For the second best, a premium of	7 00
For the best specimens and varieties of Grapes, grown under glass subsequently to July 1st,	10 00
For the second best, a premium of	7 00
GRAPES, (<i>Native</i>).—For the best specimen and variety of Native Grapes,	5 00
For the second best, a premium of	3 00
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	\$450 00

THE Committee on Fruit will hold a session to award the premiums on *Summer Apples and Pears*, on the first Saturday in September.

On *Autumn and Winter Apples and Pears*, on the third Saturday in December.

All Gratuities for Seedlings will be equal to the highest prize awarded to that variety of fruit.

PREMIUMS FOR PLANTS, FLOWERS, AND DESIGNS.

Amount appropriated, Six Hundred and Fifty Dollars.

DISPLAY OF GREENHOUSE PLANTS, IN POTS, THROUGH THE SEASON.

For the best display of Greenhouse Plants through the season, the Appleton Gold Medal, valued at	\$40 00
For the second best display of do., the Society's Silver Gilt Medal, valued at	15 00

Provided, however, that whatever amount may be awarded during the season for the exhibition of Pot Plants, to the person who shall be entitled to said medals, shall be deemed as constituting a part of their value.

DISPLAY OF GREENHOUSE PLANTS, IN POTS.

To be exhibited at the opening of the Hall, on the 1st Saturday in May:

PELARGONIUMS.—Class I.—For the best six new and rare varieties, grown in eight-inch pots, a premium of	\$6 00
For the second best,	4 00
Class II.—For the best six varieties of any sort, grown in large pots, a premium of	6 00
For the second best,	4 00
ROSES.—For the best six varieties of Tea, Bourbon, Noisette, or Bengal,	6 00

For the second best,	\$4 00
For the third best,	2 00
CUT FLOWERS. —For the best display, a premium of	3 00
For the second best,	2 00
FUCHSIAS. —For the best six varieties, a premium of	6 00
For the second best,	4 00
CACTUS. —For the best six varieties, a premium of	3 00
For the second best,	2 00
CALCEOLARIAS. —For the best six varieties, a premium of	3 00
For the second best,	2 00
CINERARIAS. —For the best six varieties, a premium of	3 00
For the second best,	2 00
HEATHS. —For the best varieties, a premium of	3 00
For the second best,	2 00
VARIOUS SORTS. —For the best display of various sorts of Green-house Plants, not less than twelve pots, a premium of	8 00
For the second best display,	5 00
HYACINTHS. —Premiums to be awarded second Saturday in May.	
For the best display, not less than twenty varieties,	5 00
For the second best,	3 00
TULIPS. —Premiums to be awarded the third Saturday in May.	
For the best thirty distinct varieties, a premium of	8 00
For the second best,	6 00
For the third best,	3 00
PANSIES. —Premiums to be awarded the fourth Saturday in May.	
For the best twelve distinct varieties, a premium of	4 00
For the second best,	3 00
For the third best,	2 00
HAWTHORNS. —Premiums to be awarded the fourth Saturday in May.	
For the best display, a premium of	3 00
For the second best,	2 00
HARDY AZALEAS. —Premiums to be awarded fourth Saturday in May.	
For the best display, a premium of	3 00
For the second best	2 00
SHRUBBY PÆONIES. —Premiums to be awarded fourth Sat'dy in May.	
For the best six varieties, a premium of	5 00
For the second best,	4 00
For the best display,	3 00
HERBACEOUS PÆONIES. —Premiums to be awarded 2d Sat. in June.	
For the best twelve flowers, having regard to the number of varieties,	5 00
For the second best,	4 00
For the best display,	3 00
PINKS. —Premiums to be awarded third Saturday in June.	
For the best six distinct varieties, a premium of	4 00
For the second best,	3 00
For the best display,	2 00

HARDY ROSES.—Premiums to be awarded third Saturday in June.*Hardy Roses.*

Class I. —For the best thirty distinct varieties, a premium of . . .	\$8 00
For the second best,	6 00
For the third best,	4 00
For the best display,	3 00
Class II. —For the best twelve distinct varieties, a premium of . . .	5 00
For the second best,	3 00
For the third best,	2 00

Perpetual Roses.

Class III. —For the best ten varieties, a premium of . . .	5 00
For the second best,	4 00
For the best display,	3 00

Prairie Roses.

Class III. —For the best display, not less than four varieties, . .	4 00
For the second best,	3 00

CARNATION AND PICOTEE PINKS.—Premiums to be awarded third Saturday in July.

For the best ten varieties, a premium of	5 00
For the second best,	4 00
For the best display,	3 00

MAGNOLIAS.—For the best display through the season, . . .

For the second best,	3 00
For the second best,	2 00

HARDY RHODODENDRONS.—For the best display of the season, .

For the second best,	3 00
For the second best,	2 00

DOUBLE HOLLYHOES.—Premiums to be awarded 3d Sat. in July.

For the best display, a premium of	3 00
For the second best,	2 00
For the third best,	1 00

DOUBLE BALSAMS.—Premiums to be awarded 2d Sat. in August.

For the best display, a premium of	3 00
For the second best,	2 00
For the third best,	1 00

PELOXES.—Premiums to be awarded third Saturday in August.

For the best ten distinct varieties, a premium of	6 00
For the second best,	4 00
For the third best,	3 00

GERMAN ASTERS.—Premiums to be awarded 2d Saturday in Sept.

For the best display, a premium of	4 00
For the second best,	3 00
For the third best,	2 00

BOUQUETS, WREATHS, DESIGNS, &c.

Premiums to be awarded at the Annual Exhibition.

VASE BOUQUETS. —For the best pair suitable for the Bradlee Vases, a premium of the Bradlee Plate, valued at	10 00
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For the second best,	\$6 00
For the best pair for the Society's Marble Vases,	10 00
For the second best,	6 00
PARLOR BOUQUETS. —For the best pair suitable for the parlor,	8 00
For the second best,	6 00
For the third best,	5 00
For the fourth best,	3 00
POT PLANTS. —For the best display, of not less than 20 Pot Plants,	12 00
For the second best,	10 00
For the third best,	8 00
For the fourth best,	5 00
COCKSCOMBS. —For the best six pots, a premium of	3 00
For the second best,	2 00
BALSAMS. —For the best six pots, a premium of	3 00
For the second best,	2 00
DAHLIAS. —Premiums to be awarded fourth Saturday in September.	

Division A.

PREMIER PRIZE. —For the best twelve dissimilar blooms, the Society's Silver Medal,	5 00
SPECIMEN BLOOM. —For the best flower,	3 00
VARIOUS COLORS. —For the best yellow, buff, or orange; purple or maroon; crimson or claret; very dark; white; edged or tipped; scarlet; pink or rose, a premium of \$1 each,	8 00

Division B.

Class I. —For the best twenty-four dissimilar blooms,	8 00
For the second best,	5 00
Class II. —For the best eighteen dissimilar blooms,	6 00
For the second best,	4 00
Class III. —For the best twelve dissimilar blooms,	5 00
For the second best,	3 00
HERBACEOUS PERENNIALS. —For the best display through the season, the Society's Silver Medal,	5 00
For the second best, a premium of	4 00
For the third best,	3 00
ANNUALS. —For the best display through the season, the Society's Silver Medal,	5 00
For the second best display, a premium of	4 00
For the third best,	3 00
CAMELLIAS. —Premiums to be awarded second Saturday in Feb.	
For the best twelve varieties of cut flowers, with foliage,	8 00
For the second best,	5 00
CHINESE PRIMROSE. —Premiums to be awarded 2d Saturday in Feb.	
For the best six varieties in pots, a premium of	3 00
For the second best,	2 00

GREENHOUSE AZALEAS.—Premiums to be awarded 2d Sat. in March.

For the best six varieties in pots,	\$6 00
For the second best,	4 00
SHRUBBY PLANTS. —For the best display, during the season,	5 00
For the second best,	4 00
For the third best,	3 00

PREMIUMS TO BE AWARDED AT WEEKLY EXHIBITIONS.

<i>Amount appropriated, One Hundred and Twenty-two Dollars,</i>	122 00
For the best six Pot Plants, of different varieties,	\$3 00
For the second best,	1 00
For the best large Bouquet for vases or parlor, composed of flowers gracefully arranged,	2 00
For the second best,	1 00
For the best pair of Bouquets, of any description,	2 00
For the second best,	1 00
—	\$650 00

PREMIUMS FOR VEGETABLES.*Amount appropriated, One Hundred and Fifty Dollars.*

ASPARAGUS. —For the earliest and best, not less than three bunches,	\$5 00
For the second best, a premium of	3 00
BETS. —For the best (pure blood bet,) during the season, not less than twelve roots, a premium of	3 00
BROCCOLI. —For the best three heads, a premium of	5 00
BEANS. —For the best and earliest peck of string beans,	3 00
For the best and earliest Lima Beans, not less than 2 quarts,	3 00
For the best and earliest variety of shell beans,	3 00
CUCUMBERS. —For the best pair under glass, previous to the first Saturday of June, a premium of	5 00
For the second best, a premium of	3 00
For the best and earliest, of open culture, a premium of	3 00
CAULIFLOWERS. —For the best and largest, during the season, not less than three heads, a premium of	5 00
For the second best, a premium of	3 00
CORN. —For the best and earliest sweet corn, not less than twelve ears,	3 00
For the second best, a premium of	2 00
CABBAGE. —For the best drumhead cabbage, during the season, not less than three heads, a premium of	5 00
For the second best, a premium of	3 00
For the best Savoy cabbage, during the season, not less than three heads, a premium of	3 00
For the second best, a premium of	2 00
Egg PLANTS. —The best display, during the season, a premium of	3 00
For the second best, a premium of	2 00
LETTUCE. —For the best six heads, before the 1st Saturday in July,	3 00
For the second best, a premium of	2 00

POTATOES.—For the best <i>new</i> seedling, of superior quality, for the table,	\$10 00
For the best and earliest peck, previous to August 1,	3 00
For the second best, a premium of	2 00
PEAS.—For the best and earliest peck in June, a premium of	3 00
RHUBARB.—For the largest and best, previous to the first Saturday in July, not less than twelve stalks, a premium of	5 00
For the second best, a premium of	3 00
SQUASHES.—For the best pure Canada squashes, not less than six in number, a premium of	3 00
For the greatest variety exhibited during the season,	5 00
TOMATOES.—For the best and earliest, not less than one dozen,	5 00
VEGETABLES.—For the best display and greatest variety at the weekly exhibitions, during the season, a premium of	5 00
For the second best, a premium of	3 00
For the best display and greatest variety at the annual exhibition,	10 00
For the second best, a premium of	6 00
For any new variety of vegetables suitable for the table, and worthy of cultivation, other than seedling potatoes,	5 00
CELERY.—For the best and largest blanched, not less than six roots, a premium of	5 00
For the second best, a premium of	3 00
CARROTS.—For the best exhibited, a premium of	2 00
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	\$ 150 00

RULES AND REGULATIONS.

1. All Fruits, Flowers, and Vegetables, offered for prizes, are to be the growth of the competitors.

2. Articles exhibited for Prizes must be placed in the Stands by 11 o'clock, A. M.

3. Contributors of Fruits, for exhibition or premium, are requested to present the same in dishes or baskets of the Society, or in suitable baskets or boxes of their own.

4. After the articles are arranged, they will be under the exclusive charge of the Committees, and *not even the owners* will have liberty to *remove*, or *touch* them until the exhibition is closed, when they will be delivered as the contributors may direct.

5. No Flower, Fruit, or Vegetable, will be entitled to a prize unless it possesses points of superiority, and the Committees have the discretionary power of withholding Prizes, if, in their opinion, the articles exhibited do not merit them.

6. Plants in Pots to be entitled to Prizes must give evidence of skilful culture, in the profusion of bloom, and the beauty, symmetry, and vigor of the specimens.

7. Successful competitors will be expected to furnish remarks on their

mode of cultivation, if *peculiar*; and candidates for the Fruit Prizes will be required to present specimens for trial.

8. Premiums can only be awarded to exhibitors who have complied with the published Rules and Regulations.

9. No article for which a premium has been once awarded, can receive another during the season, with exception of such Fruits as are included in the "Special Prize List."

10. The Committees are authorized to award Extra Prizes for any new or rare Fruits, Flowers, Vegetables, Plants, or Designs of merit, and for which no Premium has been offered.

11. The Fruit Committees, in making their awards, will consider the flavor, beauty, and size of the specimens, and each of these properties as compared with a fair standard of the variety.

12. In deciding on the merits of a Fruit or Vegetable, its value for general cultivation will be taken into account, but *superior* specimens of any good variety will not be excluded from Prizes, even though they may not flourish in all situations.

13. When specimens are presented for a *name*, the exhibitor is requested to communicate all the information he possesses, as to the *origin*, and the *local* appellation.

14. It will be the duty of the Committees to *exclude from Exhibition all inferior specimens*. Also, all such *Designs* as, in their opinion, evince an incorrect taste.

15. The Committees have power to change the time of exhibition, for any article, if an early or a late season renders such change necessary, giving reasonable notice thereof to the Society.

16. Any person to whom a Prize has been awarded, whether in money, medals, or plate, may receive *either, of like valuation*, at his option; all premium, not applied for within one year from the time of award, shall revert to the Society for its own use and benefit.

17. In order to afford the Committees an opportunity to examine and report on the articles exhibited, no other person can be admitted to, or remain in, the Hall, between the hours of eleven and a half and twelve, on the days of exhibition.

18. The Society earnestly invites the coöperation and competition of cultivators. The Prizes are *open to all*, and the Society is instituted for the *benefit of all*.

¶ The foregoing Schedule of Prizes, having received the approval of the Executive Committee, and the regulations confirmed by a vote of the Society, is now published as the List of Premiums for the current year.

February 5th.—An adjourned meeting of the Society was held to-day,—the President in the Chair.

The Special Committee for settling with the Mount Auburn Cemetery reported that the amount of the Society's proportion of sales for 1847 was \$4,495 09, and that they had received the further sum of \$995 09.

Mr. Newhall, Chairman of the Committee on Medals, reported that they had caused to be struck, at the Mint in Philadelphia, Fifty Silver Medals,

of the value of FIVE Dollars each ; and it was voted that the same remain in the hands of the Chairman, to be called for as the Society may require them. The Committee were also authorized to procure gilt medals if called for by the Society.

It was also ordered that the Treasurer cause appropriate inscriptions to be made on such medals as may have been awarded for prizes.

It was *Voted*, that the blank in the report of the Committee on the Library be filled with the sum of \$ 100.

The following members were elected :—Daniel Leach, Roxbury ; E. S. Rand, Dedham ; Ed. Burns, Brighton ; and D. S. Smalley.

Adjourned four weeks, to March 4th.

Exhibited.—**FRUIT** : By the President of the Society, from S. J. Gustin, New Jersey, specimens of the Monmouth Pippin ; also from Wm. Dana, of Roxbury, apples without name ; the specimens of the former deficient in flavor, owing, probably, to the improper mode of packing, or from having been kept in an unfavorable place. From Dr. Wight, several specimens of apples received from R. Mattison, Bennington, Vt., none of which were of remarkable quality. From S. W. Cole, from various sources, Fall Pippin, 20 Ounce, Mother, Jewett's fine Red, and Detroit apples : the three first named were handsome, and of superior quality ; the Mother is decidedly a remarkable apple. From John Owen, R. I. Greening, Newtown Pippin, and other apples.

February 12th. Exhibited.—**FLOWERS** : The exhibition to-day of camellias and primroses for premium, though not bringing together many competitors, displayed some very fine flowers of the camellia, and some remarkably beautiful specimens of primroses. The latter were from Mr. Cadness and Mr. Quant ; Mr. Cadness sent three plants of the double purple, and three of the double white, each with at least eight or ten trusses of their beautiful flowers fully expanded.

From the President of the Society, twenty-eight varieties of camellias, viz. : Donckelaëri, americana, Coquettii, concinna, Campomolenda, Henri Favre, orchroleuca, Duchesse d'Orleans, and five seedlings ; among the new varieties were C. Teutonia, deep flesh-color, striped with red, a remarkably fine variety ; C. Colletii ; C. nitida ; C. peregrina, curiously mottled and striped ; C. cruciata, beautifully variegated with white ; also *Abutilon venosum*, fine specimens of *Chorizema varium*, and a long branch of a seedling *Acacia* from *A. spectabilis*, much like its parent.

From Messrs. Hovey & Co., sixteen varieties of camellias, viz. : C. imbricata, myrtifolia, Henri Favre, elegans, Feastii, delicatissima, Flöyssi Donckelaëri, corallina, decora, tricolor, speciosa, florida, &c.

From John Cadness, from the Garden of J. L. L. F. Warren, thirteen varieties of camellias, as follows :—Ochroleuca, candidissima, old white, Hume's blush, eximia, Mrs. Abby Wilder, Löwii, imbricata, rubra plena, Leedna superba, Henri Favre, &c. ; also, three pots of double purple, and three plants of the double white Chinese primrose, finely grown, and plants of *Boronia anemoniflora*, and *B. pinnata*. From W. Quant, ten pots of white and purple Chinese primroses.

AWARD OF PREMIUMS AND GRATUITIES.

CAMELLIAS.—For the best twelve distinct varieties, to J. Cadness, a premium of \$8.

For the second best, to Messrs. Hovey & Co., \$5.

A gratuity to the President, for fine flowers, \$8.

CHINESE PRIMULAS.—A gratuity to John Cadness, for fine specimens, \$3.

A gratuity to W. Quant, for fine specimens, \$3.

ART. V. *Answers to Correspondents.*

WHITE LAGERSTROEMIA.—Is there a White Lagerstrœmia? I see it in Prince's Catalogue. [Not to our knowledge.—*Ed.*]

GESNERA ZEBRINA. *R. C. Wood.*—The plant you had is undoubtedly the true kind; there is no other species at present introduced which has a similar leaf—so peculiarly marked—from whence its name; but the probability is, that your specimen has never been well grown; to see it in its real beauty, it requires the temperature of the stove after the month of September; in the greenhouse, the flowers rarely open, or, if they do, they are, as you say yours were, “blush or dingy white.” Until we placed it in a high temperature, we thought it quite worthless, except in regard to its fine foliage; but, the past autumn, we have had spikes of flowers ten inches long, and of a bright scarlet. A correspondent, in a previous volume, (XI. p. 58,) has given excellent directions to grow it to perfection, to which we would refer our correspondent.

GLADIOLUS PUDIBUNDUS. *R. C. Wood.*—This fine variety has bright pink flowers, similar to Colvillii, while *G. blanda* has white flowers with a deep red stripe in each petal. You will be at no loss to tell which of the two your plants are. Some species and varieties of *Gladiolus* throw off small perfect bulbs, like the *G. natalensis*, while others, like the *G. cardinalis*, push out a kind of sucker bulb; the latter, if separated from the parent when too small, are rather difficult to root, and require much care to do it successfully. The best way is, to let them remain two years, when they will acquire sufficient strength to grow readily.

VERONICA SPECIOSA. *R. C. Wood.*—This plant should be headed down at this season of the year—at least the strong shoots—re-potted, and placed in a warm situation in the greenhouse. If properly treated, it will make a most showy ornament during the fall months. In the stove, we have had it in flower all the winter, and, at the moment we write, several plants have strong spikes of its rich violet purple flowers fully expanded.

VERBENAS. *A Subscriber.*—Twelve of the finest verbenas are the following:—Feast's Crimson, Feast's Purple, Gazelle, Suzette, Eclipse, Gem, Julia, variabilis, Rosy Cluster, Feast's White, Dove-Eye, and Othello.

HORTICULTURAL MEMORANDA

FOR MARCH.

FRUIT DEPARTMENT.

Grape Vines, in the greenhouse or grapery, will now be pushing vigorously, and, by the latter part of the month, will show their flower-buds. As soon as the eyes are all well broken, the shoots should be tied firmly up to the trellis. Syringing should also be continued, every day, except in damp weather. As soon as the shoots show their flower-buds, dis-budding should be commenced ;—that is, to rub off every new shoot which is not wanted to bear fruit, or form a spur ; on vines pruned on what is called the close system, these shoots will be quite numerous, and, after selecting that which promises best, the others must be taken off. On vines pruned on the long spur method, all the shoots at the base should be rubbed off, unless wanted to make a spur for another year. Some of the most forward vines will also need topping before the close of the month, and will also require to be neatly tied in, at a regular angle from the main stem, and tied firmly, to prevent their being broken, as they often are, by their own weight. [See our Diary in the last volume, for temperature.] Vines in pots should now be liberally watered. Vines in cold houses will require to be uncovered the latter part of the month, and, if the weather is warm, the house should be well aired in the middle of the day. Isabella and other hardy grapes may now be pruned.

Root-grafting may still be done : the roots should be carefully placed in boxes, and removed to a cool place, until the season for planting in April.

Raspberry plantations may be uncovered the last of the month, should the weather be mild.

Strawberry beds may be also partially uncovered, if the season is favorable.

Scions may yet be cut, placing them in a cool place.

Grafting, where there is a great deal to do, may be commenced the last of the month.

Pruning orchards should now be attended to before the hurry of spring work commences.

Pear, apple, and quince seeds, not planted last fall, should be got into the ground the first favorable opportunity.

FLOWER DEPARTMENT.

Camellias will now be making their new growth, and will require liberal supplies of water at the root, and frequent syringing over the foliage ; indeed, the latter operation should not be omitted whenever the weather is fine. If there is danger of burning from the glass, the plants should either be shaded by a curtain of some kind, or the glass can be coated with whitening ; the latter mode we generally adopt. If any of the plants are crooked,

now is the time to bring them into good shape, by cutting in the branches, and heading down long shoots. Inarching and grafting may be performed now.

Pelargoniums will now be coming forward, and care should be taken that they have an abundance of air : if this is neglected, the shoots will be drawn up, and rendered unfit for producing vigorous heads of flowers. Water occasionally with guano, and fumigate as soon as the green fly appears. Keep the shoots tied well down in order to make bushy plants.

Achimenes of all the different kinds should now be potted off in order to get a good stock ; no plants are gayer all summer than these, and no collection should be without a good number of plants.

Cinerarias and *Calceolarias* will require repotting again.

Gloxinias and *Gesneras* will now be growing freely, and should be repotted the last part of the month.

Roses will now be in full bloom, and will require liberal supplies of water ; syringe freely, fumigate with tobacco for the green fly, and with sulphur for the Red Spider, which is often troublesome to roses.

Veronica speciosa and *Lindleyana* should now be repotted ; if the plants are straggling, they should be headed in.

Chinese Primroses should be shifted again, if fine large plants are wanted.

Dahlias for early blooming may now be placed in the greenhouse or hot-bed. [See the excellent article at p. 27.]

Hyacinth and *Tulip beds* should be uncovered the latter part of the month, or as soon as danger of severe frost is over.

Neapolitan Violets should be repotted, and they will continue for a long time in bloom.

Cacti should now be shifted into larger pots.

Fuchsias will continue to require attention : if the plants are old ones, head them well in, with the exception of *Corymbiflora* and *fulgens*, and repot in good rich soil.

Heaths, *Epacrises*, and *New Holland plants*, should be repotted if they require it.

Annual flower seeds of such kinds as *Ten-week stocks*, *Phlox Drummondii*, *Petunias*, *Balsams*, *Asters*, *Lotus jacobæus*, *Pansies*, *Stevia*, *Brachycome*, &c., should now be planted in boxes, and placed in the greenhouse or hot-bed.

Gladioluses for early blooming should now be potted.

Carnations, and other plants in frames, should be well aired in fine weather.

Heliotropes, *Salvias*, *Scarlet Geraniums*, *Verbenas*, *Lantanas*, and other showy plants, should now be propagated for a stock for bedding out in spring.

Cubystegia pubescens.—The rhizomes or roots of this fine plant should now be potted in a light free soil.

Ipomæa Learii should now be propagated for a stock for planting out in the border in summer, where it is one of the most brilliant things in the garden.

THE MAGAZINE OF HORTICULTURE.

APRIL, 1848.

ORIGINAL COMMUNICATIONS.

ART. I. *On the Culture of the Pear on the Apple.* By JAMES WEED, Bloomington, Iowa.

MR. HUMRICKHOUSE's article on this subject, (Vol. XII. p. 393,) seems likely to consign the apple, as a stock for pears, to entire oblivion. Is this right? It is remarkable that the value of the quince, as a stock for the pear, has not been more justly appreciated until within the last few years. In your Retrospective View of Horticulture for 1847, (Vol. XIII. p. 3,) you say "it is well known that many sorts of pears will not unite kindly with the quince, and the consequence is, that, in a year or two, the tree languishes and dies. *This, by some, is set down as proof that the quince will not answer.*"

Of all the varieties of pears now in cultivation, it seems a large proportion, one half, perhaps, will not grow at all on the quince. Some are described as growing indifferently, and being *short-lived*; others are said to "succeed well," while a few are remarkable for growing freely. Among varieties known to grow freely, will not the quality of *durability* be found to pertain to different varieties in a degree worthy the attention of cultivators? Some five or six years ago, we saw it several times stated in periodicals, that the age of the pear on the quince was six or eight years; now, it is extended to twenty-five, and may we not yet discover varieties that will endure for a period of fifty years?

We have been watching for information relative to the culture of the pear on the quince, and Mr. Rivers's article was very welcome and instructive. Mr. R. mentions three varieties which he uses for double working, one of which, *Beurré*

d'Amalis, we happened to possess, and, on examination, we found we had inserted about one dozen buds of this variety the previous autumn, and these were, at least, 100 per cent. larger, on an average, than twelve or fifteen other varieties inserted at the same time, and much larger than Williams's Bon Chrétien, which succeeded very well. This discovery afforded some self-gratification: though but just embarked in the business of horticulture on the other side of "the great Father of Waters," we were one year in advance of Mr. Rivers's article, and this we set down as one of the benefits of having more than just a few of the best varieties, in order to prosecute the business of fruit culture successfully.

This quality of some varieties to grow freely or indifferently on the quince, while this stock is entirely obnoxious to others, has suggested some reflections in relation to the culture of the pear on the apple, thorn, etc. It is said that the quality of some sorts of pears is most improved by grafting on the quince, and others are, perhaps, deteriorated. Does this improvement result merely from the effect of dwarfing, or does it depend on some peculiarity or relation the variety bears to the quince stock? Suppose it were ascertained that the Duchesse d'Angoulême was most improved by the quince stock, would not this improvement be extended, in some degree, to other varieties by double working on the Duchesse d'Angoulême? We think there is yet much to be learned in relation to the peculiarities of varieties before it can be ascertained under precisely what circumstances each variety can be most happily cultivated: and the apple stock may yet prove of service in its own way.

Mr. Humrickhouse's experiments we regard as too limited to negative the importance of the apple stock altogether, and only prove negatively, that, in twenty varieties, six failed to grow at all. Some sixteen grew but indifferently, and were short-lived: and positively three or four varieties grew tolerably well; Williams's Bon Chrétien appeared to be not at all dwarfed, but promised to make standard trees, and the Seckel, in accordance with Mr. Ernst's testimony, produced fruit of more than twice the usual size, and of superior flavor. Now if the Seckel,—until recently acknowledged "the best pear in the world,"—can be thus improved by the apple, who

can inform us that Swan's Orange would not be similarly improved by the same means, or that other varieties would not be improved by double working on the Seckel, or some other variety which may yet be found to grow well and unite kindly on the apple?

Had experiments like Mr. Humrickhouse's been instituted fifty years ago, to ascertain whether the pear would succeed on the quince, and conducted with twenty varieties first at hand, what proportion would have grown but indifferently, if at all, and what chance would there have been to have got even one in that number to grow freely on the quince? It is certain that many of the varieties which grow most freely on the quince have been originated since that period, and present a new creation in relation to this subject.

We had been grafting the Pound, Williams's Bon Chrétien, and two other varieties, the names of which were lost, on apple roots, two years before Mr. Humrickhouse's article appeared, and with similar success to his, except that, in one of the nameless sorts, we found a much more certain grower than Williams's Bon Chrétien. Our subsequent trials with this sort have proved that it grows nearly as well on the apple root as the apple itself. Last spring, we grafted some eighty varieties on the apple above ground. Of these, as we expected, many failed, or made but a poor growth; but a few seemed to grow as well as if on the pear stock. Edwards's Henrietta succeeded best; a seedling, set by mistake, grew nearly as well; Aston Town, Althorpe Crassane, Prince's St. Germain, Fondante d'Automne, Cross, Dunmore, St. Andre, and Ambrosia, I noted as growing freely. Edwards's Elizabeth, Ananas d'Ete, Van Mons Leon le Clerc, and some others, made a tolerable growth. It may be proper to state, that the scions were not all in the best order, and many, which barely grew, may make a much better growth next year; and some allowance might justly be made for working above ground; a goodly number of scions of the Beurré Diel in good order in this manner proved almost an entire failure, while Mr. H. had tolerable success with this variety on the root.

Mr. Humrickhouse suggests the use of a long scion with a view to establishing the tree on its own roots, but, if we mistake not, we need more extended experiments of precisely the

character of his own to show what varieties will grow on the apple, and what most readily strike root, and promise to make standard trees.

In your review of commercial gardening for the year 1847, (Vol. XIV. p. 11,) you notice an extensive nursery in Wisconsin. We have been, for some time, engaged in what we regard a laudable enterprise in a new country like this, viz., in making a collection of all the desirable varieties of fruits cultivated in the United States, and if, as it appears, there is a more extensive or a better selection of varieties in Wisconsin, than is embraced in the catalogue we sent you some time ago, we wish you would please inform us where it is located, as we were under the expected necessity of sending to the eastern cities for our future supplies.

Bloomington, Iowa, Feb. 14, 1848.

We are gratified in offering so good an exposition of the art of horticulture in the far west, where, but a few years since, no fruit trees, save those indigenous to the prairies and woodlands of that region, were to be found. It is, at once, a convincing proof of the ardor of our people in overcoming every obstacle to success, and of the diffusion of a taste for flowers and fruits even at so remote a distance from the great centre of horticultural improvement in this country.

The hints and suggestions of Mr. Weed are timely, and of importance; though we must admit that we have not much faith in the apple as a general stock for the pear, even to the extent of the quince, still we would, by no means, condemn it, but, on the contrary, we would urge all amateurs, as well as gardeners and nurserymen, who can spare the time, to try further experiments with a view to arrive at more certain results, and through a greater number of years, than has yet been attempted. We certainly agree with Mr. Weed, that the failure of a few in this early stage of experiment, should not induce us to wholly give up further trial. We commend our correspondent's remarks to the especial attention of every cultivator. The collection alluded to at p. 11, as existing in Wisconsin, was an error. In the multiplication of new states, we had almost forgotten that of Iowa, and, while our correspondent's catalogue lay before us, without reflection we

placed his collection in Wisconsin, a mistake which we now most cheerfully correct. Mr. Weed deserves well of the cultivators of his adopted state, who are making plantations of fruit trees, for his exertions in the introduction of most of the really fine varieties of fruit.—*Ed.*

ART. II. *Descriptions and Engravings of Select Varieties of Plums.* By the EDITOR.

IN our last volume, (XIII. p. 529,) we commenced a series of articles descriptive of all the choicest varieties of plums, in the same style in which our descriptions of pears have been given. Four new and superior kinds were then figured, and we now have the pleasure of adding four more to the number. Our object will be, as with the pear, not only to describe and figure the several kinds, but to add all the synonymes under which they are known, in order that the existing confusion in the nomenclature of the plum may be cleared up.

5. WASHINGTON. *Pomological Magazine*, Vol. I. pl. 16.

Bolmar's Washington. *Guide to the Orchard.*

Bolmar,
New Washington, } Lond. Hort. Soc. Cat. 3d. Ed.
Franklin,

Superior Green Gage, } of some American collections.
Superior Gage,

The Washington plum (*fig. 14.*) deservedly holds the highest rank among the numerous varieties which have been yet produced: nearly equalling the Green Gage in flavor, and far surpassing it in size and beauty, it has, to a considerable extent, taken the place of that old and excellent plum. The tree is also of vigorous habit, with a broad and ample foliage, quite unlike any of the kinds previously known.

The history of the Washington is very well known, though its origin is involved in some obscurity. Mr. Floy, in his edition of Lindley's *Guide to the Orchard*, states that it sprang

from the root of a grafted tree in New York, which had been destroyed by lightning below the graft; a few suckers came

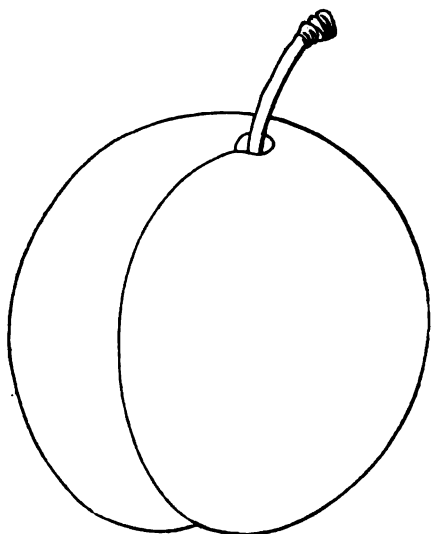


Fig. 14. *Washington.*

up from the root, and these were sold in New York market. Mr. Bolmar was the purchaser of one of them, and when his tree came into bearing, he requested Mr. Floy to call and see it; this he did, and the beauty of the foliage, as well as the immense size and beauty of the fruit, surprised him. Mr. Bolmar gave him buds, from which he propagated the variety, and sold the trees from his

nursery: he also had a drawing made of the fruit at that time, (1818,) which is now in his possession.

The late Mr. Prince also gives an account of it in the *Pom. Manual*, where he states that the variety was well known in Flushing about the year 1824, at which period there were several trees of "the thickness of a man's thigh," and that it was cultivated, for a long time, under the name of the Superior Gage. He was unable to trace it any farther than Flushing, and he had strong evidence that it was one of the numerous seedlings which his father raised about the year 1790, from the Green Gage, when the Imperial Gage, Red Gage, and other fine varieties, were originated from the same lot of seeds.

The Washington is of exceedingly vigorous growth, and, consequently, does not come into bearing very early; but, by judicious pruning of the branches, and occasional pruning of the roots, young trees may be brought much earlier into bearing than usual. It is a great and constant bearer when it once begins to fruit, and the branches frequently need propping up to prevent their being broken by the weight of fruit. Some

of the largest specimens from vigorous trees have measured six and a half or seven inches in circumference.

Fruit, large, about two and a quarter inches long, and two and an eighth of an inch in diameter, roundish oval, largest in the middle, and tapering to each end, with a distinct but shallow suture extending half round : *Skin*, fair, smooth, dull yellow, inclining to orange in some specimens, dotted and marbled with crimson on the sunny side, and covered with a thin lilac bloom : *Stem*, medium length, about three quarters of an inch, rather stout, and inserted in a shallow cavity : *Flesh*, yellow, rather firm and melting, separating freely from the stone : *Juice*, abundant, rich, sugary, sprightly, and luscious : *Stone*, medium size, oval, acute at each end, deeply furrowed, and nearly even at the edges. Ripe the last of August and beginning of September.

Wood, stout, short-jointed, and slightly downy.

6. SAINT MARTIN ROUGE. *Bon Jardinier.*

Coe's Fine Late Red. Hort. Soc. Cat. 3d Ed.

Saint Martin, of some French collections.

Red Saint Martin. Pom. Manual.

Prunier de St. Martin. N. Duhamel.

Coe's Late Red. Fruits and Fruit Trees of America.

This fine plum (*fig. 15.*) has been erroneously named, in England, Coe's Fine Late Red, from the fact that it was brought to notice by Mr. Coe, as a new seedling; but it subsequently proved to be the old Saint Martin Rouge, of French collections: instead, however, of dropping the new name, it has been improperly retained, and is described under this cognomen in the third edition of the *Catalogue* of the London Horticultural Society. Mr. Prince and Mr. Kenrick have both retained the French name, and, believing this to be its proper one, we have also adopted it, not

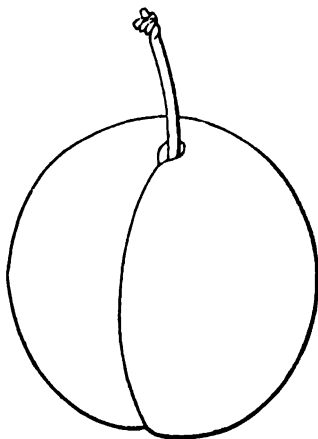


Fig. 15. Saint Martin Rouge.

wishing to give greater publicity to a palpable error of the Society's *Catalogue*.

The Saint Martin Rouge is a very superior late plum, much resembling the Reine Claude both in shape, color, and size, and, like that, a high-flavored and delicious fruit, coming in about the middle of October, when, with the exception of the Golden Drop and Frost Gage, there are no fine plums: it frequently hangs upon the tree till injured by frosts.

Fruit, medium size, about one and three quarter inches long, and one and five eighths in diameter, of roundish, regular form, with a distinct but rather shallow suture on one side, ending in a considerably depressed point at the apex: *Stem*, rather long, about three quarters of an inch, slender, and inserted in a small cavity: *Skin*, dull purplish red, little spotted with yellowish dots, and covered with a thin violet bloom: *Flesh*, yellow, little firm, but very melting, and slightly adhering to the stone: *Juice*, abundant, rich, saccharine, vinous, sprightly, and high-flavored: *Stone*, oval, rather small, nearly smooth. Ripe in October, and keeps well.

Wood, rather slender, downy.

7. COOPER'S. *Coxe's View, &c.*

Cooper's Large Red. *Pomological Manual*.

Cooper's Large. *Guide to the Orchard*, Am. Ed.

Smith's Orleans. *Fruits and Fruit Trees of America*.

Smith's Orleans. *Pomological Manual*.

Violet Perdrigon,

Red Magnum Bonum, } Incorrectly, of some American collections.

No plum of American origin has been so greatly confused in its nomenclature as this, (*fig.* 16.) Coxe first described it in his excellent work, *A View of the Cultivation of Fruit Trees, &c.* as long ago as 1817, and states that "it was produced from the stone of an Orleans plum planted by Mr. Joseph Cooper, of Gloucester county, New Jersey." His description is complete, with one important omission, viz., the adherence or non-adherence of the flesh to the stone; and from this cause has arisen much of the confusion now existing in regard to this variety.

In our volume for 1843, (IX. p. 410,) is a full account of

Smith's Orleans plum, by Mr. Downing, in which he attempted to prove the existence of such a fruit; but, unable to refer it to the original description of that variety in Prince's *Pomological Manual*, on account of the latter being a free stone variety, he wrote to Mr. Prince for additional information upon that important point; Mr. Prince immediately referred to the original description of it by his father, and thought it "not unlikely that he, in copying, might have altered or transposed a word or two," and, upon this statement, Mr. Downing at once inferred that he had identified the plum, so generally cultivated under half a dozen synonymes, as the Smith's Orleans, of Prince. In a note to his article, we entirely dissented from his conclusions, remarking that we were in want of further information, which, when obtained, we should lay before our readers. We are now fully prepared to do so.

It has been our belief, that Smith's Orleans was a misnomer, and that it was identical with the variety known as Cooper's plum, and described by Cox, Kenrick, and Manning.

In the spring of 1831 or '32, we received, from Messrs. Prince of Flushing, several plum trees, and, among them, Cooper's Large Red. The tree was remarkable for its growth, and, in consequence, it did not produce fruit for six or eight years. When it came into bearing, we exhibited the fruit, and were told, by some cultivators, that it was Smith's Orleans, by others, Duane's Purple, and finally, in 1843, when we had some beautiful specimens, by Mr. Downing, that it was the true Violet Perdrigon; but, in every instance, we denied this, and not only referred to Mr. Prince, as the source from whence we obtained it, but to Cox, with whose description it ex-

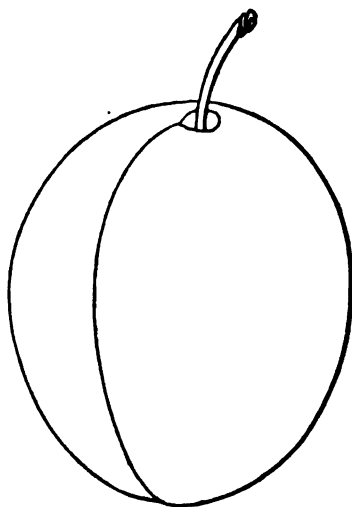


Fig. 16. *Cooper's Red.*

actly corresponded. Subsequently to this, the account of Smith's Orleans, before alluded to, was published. The fact that all the Smith's Orleans have proved to be like ours, and also the fact, which came out in Mr. Prince's reply, that it was a cling, and not a free stone, and the circumstance that our tree was received about the same time that the published account appeared in the *Pom. Manual*, convinced us that the Smith's Orleans was but a new synonyme of the Cooper. Other peculiarities, such as the luxuriance of the tree, which Coxe mentions, and also a disposition of the fruit to rot, were sufficient to prove, to any pomologist, that it could be no other than the Cooper.

We had intended, some time ago, to have prepared an article upon the subject, in order to establish the correct name of this plum; but, we trust, though late, the confusion which has so long existed may now be cleared up.

The Cooper is one of the largest of our blue plums, of handsome appearance, and of excellent quality. The tree bears to a fault; so much so, that the fruit, which quite clothe the branches, press upon each other so as to cause their decay, especially in wet weather. The tree is remarkably luxuriant, often producing shoots eight feet long in a season, with few lateral branches or spurs, and it may readily be distinguished, by its peculiar growth, from other plum trees.

Fruit, large, about two and a quarter inches long, and two inches in diameter, of oval oblong form, largest at the base, narrowing a little to the apex, which is distinctly depressed, with a distinct suture extending half round: *Skin*, rich deep purplish red, paler in the shade, covered with small, golden specks, and a rich azure bloom, which is easily rubbed off: *Stem*, short, about half an inch long, slender, and deeply inserted in a very large cavity: *Flesh*, yellow, tender, and closely adhering to the stone: *Juice*, plentiful, with a sprightly, vinous, and excellent flavor: *Stone*, large, thick, ovate. Ripe end of August and beginning of September.

WOOD, strong, stout, nearly smooth.

8. THOMAS. *Mag. of Hort.*, Vol. VII. p. 388.

The Thomas plum (*fig. 17.*) originated in the garden of Wm. Thomas, Esq., of Boston, and the tree first produced

fruit when quite young, in 1840 or '41, at which time Mr. Thomas kindly gave us buds for propagation. It was an accidental seedling, which sprang up in his garden, and bore when only seven or eight years old. In general appearance, it resembles Denyer's Victoria, having the same delicate amber or salmon-colored skin, but of larger size, and of superior flavor. The tree is vigorous and productive, and bears early.

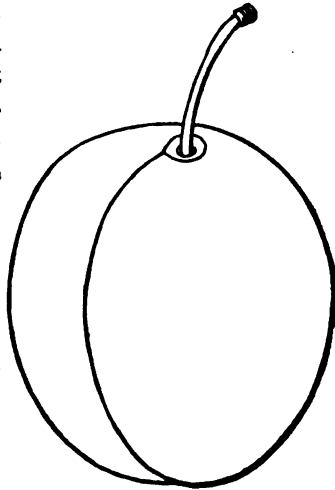


Fig. 17. *Thomas.*

Fruit, large, about two inches long, and one and three quarters in diameter, of oblong form, flattened at the apex, tapering to each end, with a shallow suture, one half larger than the other: *Skin*, dark amber color, beautifully mottled and shaded with bright red on the sunny side near the apex, profusely sprinkled with white dots, and covered with a thin whitish bloom: *Stem*, medium length, about half an inch, rather stout, and deeply inserted in a contracted cavity: *Flesh*, deep yellow, half-melting, and separating from the stone: *Juice* abundant, sweet, and pleasantly flavored: *Stone*, rather large, roundish ovate, thick, and light-colored. Ripe in September.

Wood rather stout, and slightly downy.

ART. III. *On the Cultivation of the Mushroom.* By J. KENNEDY, Gardener to S. T. JONES, Esq., Staten Island, N. Y.

SIR,—I have more than once been surprised, that, amongst the many valuable articles which appear monthly in the pages of your magazine, on the various branches of Floriculture and Horticulture, nothing, so far as I have seen, has been said

on the cultivation of the mushroom; and, as it is an old acquaintance of mine, and one which I consider deserving a prominent place in the vegetable department, especially during the winter months, I shall take the liberty of throwing out a few hints on its culture, which may not be unacceptable to at least some of your readers. My mode of culture differs in some minor points from that in general practice, but as it possesses the advantages of being both cheap and simple, I hope it may lead to a more extensive culture of this delicious vegetable.

Early in the month of November last, I erected a shelf eighteen feet long by four wide, and one foot six inches deep, in a basement, underneath a row of lean-to buildings on the north side of a vinery wall. The bottom of the shelf is elevated eighteen inches from the floor, and, in forming it, I left a cavity of one inch between each board, for the purpose of drainage, as well as to allow the heat from fermenting materials, placed underneath, to pass freely up into the bed: the shelf being completed, my bed was formed as follows:—I first shook a light layer of litter from the barn-yard, over the bottom; then four inches of horse-droppings free from the litter, and previously exposed in a dry airy place, in order that very little moisture may be in it at the time of using for forming the bed. I then put over this two inches of sandy loam, which I beat down firmly; and again put on four inches of horse-droppings and two of loam, which I also beat down; then four inches more of the horse-droppings, and two of loam, which, when thoroughly beat down, completes my bed.

Thus far completed, my next object was, to fill the vacancy underneath the shelf, with a mixture of hot stable manure, and leaves well moistened previous to their being put in, and, in the course of a week, I had a pretty lively heat in my bed; I think this was about the 18th of November. I then went to New York to procure the spawn, but, on making inquiries at the various seed stores, I found, to my regret, there was none to be had at the time. On my way home, however, I learned that a gentleman's gardener on the island had a mushroom bed the previous spring, where, on applying, I found the bed had been turned out some time previous; however, I obtained the liberty to examine the heap, and succeeded in finding suf-

ficient to give me a start; this I put into my bed, and as soon as it began to work, I lost no chance of separating it, and distributing it as equally as possible over the bed. By using this precaution, and a judicious attention to my watering-pot, I soon had the satisfaction of seeing the prospect of a rich harvest; and, indeed, I was not disappointed; for the produce, I must confess, has rather out-weighed my expectations. The first mushroom I gathered, was on the 22d of December, since which time, I have gathered, on an average, one peck per week. The bed is still improving, and I have no doubt but I shall be able to give a better supply for at least three months longer from the same bed, when I shall more than likely give it a month's rest, and then start it ahead again, when I shall furnish you with the results of my second progress.

It now remains to detail the mode of treatment since the bed was spawned, and, as the judicious applications of water are of the highest importance in the successful cultivation of the mushroom, I shall give the mode pursued by myself during the past winter, which I suppose will apply best for the system described above. I gave no water till the spawn began to run, which I was able to ascertain by thrusting my hand into the bed in various places, and when what I brought up had the appearance of net-work, and smelled like mushrooms, I gave the bed a liberal watering, which I repeated the two following days. I was then sure that I had given sufficient to moisten all the materials in the bed. This set the spawn actively to work, and I have only given a light sprinkling once a week since, which has kept the bed in a medium state, neither wet nor dry; but of the two I prefer the latter, as it is much easier at any time to wet the materials than to dry them; and too much water, in any stage of their growth, is certain destruction. With regard to temperature, I have seldom had it below 50° and never above 60° and between these two points, I am convinced, from a long course of experience, that mushrooms can be produced in the very highest state of perfection.

In gathering mushrooms, I always cut them; some twist them off, but I am not much in favor of this plan, as they are sure to disturb the young ones, which are always clustering

158 *Comparative Earliness of Eight Varieties of Beans.*

and forming about the roots of those ready for gathering. I have often met with mushrooms formed and matured under the surface of the bed; but as they push up little hillocks, they are easily distinguished, and should be uncovered carefully, that the surrounding spawn may not be disturbed. It may be prudent to mention, that, when the weather was very cold, I covered the bed with litter to the depth of 3 or 4 inches.

I may also mention, as an additional encouragement to those who may be desirous of giving the above a trial, that they can force sea kale and rhubarb to a high state of perfection in the same cellar, and, without any additional means: I have been supplying Mr. Jones's family with these vegetables, from the same basement, since February.

The Cedars, Staten Island, March 29th, 1848.

ART. IV. *Comparative Earliness of Eight Varieties of Beans, with some Remarks on their Qualities, Cultivation, &c.* By the EDITOR.

NOTHING is more important than that the relative value of all the most valuable varieties of vegetables, which are commonly cultivated for the table, should be well known; this is particularly important as regards their comparative earliness: of the great number of kinds denominated early, probably the period of maturity varies from one to four weeks; and it will be thus seen how important to the individual who wishes to produce successive crops, is that information which accurately gives their relative earliness. A few years since, we gave an article of this character upon peas, in which, by a series of experiments, we ascertained their relative earliness, &c. The same trial we have made the last year with several varieties of the bean, and we are glad to have the opportunity to present our readers with the details of the experiment, which, we trust, will enable them to select such varieties as will afford a succession crop the whole season.

On the 20th of May, 1848, the following eight kinds were planted.

The soil in which they were planted was rather heavy and moist, and, in consequence of this, the sowing was deferred rather later than usual. But a very small quantity of manure was used, and the beans were planted side by side, in eight successive rows, about three feet apart. The result was as follows :—

China Dwarf.—Sown May 20th; in flower July 15th; pods ready to string July 26th; ready to shell Aug. 16th; dry and fully ripe Sept. 4th. Time, from the date of sowing to time of gathering for stringing, sixty-seven days.

Yellow Six Weeks.—Sown May 20th; in flower July 15th; pods ready to string July 27th; ready to shell Aug. 12th; dry and fully ripe Sept. 13th. Time, from the date of sowing to time for stringing, sixty-seven days.

Early Mohawk.—Sown May 20th; in flower July 18th; pods ready to string July 29th; ready to shell Aug. 18th; dry and fully ripe Sept. 19th. Time, from the date of sowing to time of gathering for stringing, seventy days.

Red Cranberry Bush.—Sown May 20th; in flower July 22d; pods ready to string Aug. 8th; ready to shell Aug. 24th; dry and fully ripe Sept. 25th. Time, from the date of sowing to time of gathering for stringing, eighty days.

Dwarf Horticultural.—Sown May 20th; in flower July 22d; pods ready to string Aug. 8th; ready to shell Aug. 26th; dry and fully ripe Sept. 29th. Time, from the date of sowing to time of gathering for stringing, eighty days.

Early Half Moon.—Sown May 20th; in flower July 23d; pods ready to string Aug. 10th; ready to shell Aug. 26th; dry and fully ripe Sept. 11th. Time, from the date of sowing to time of gathering for stringing, eighty-two days.

Marrow.—Sown May 20th; in flower July 27th; pods ready to string Aug. 13th; ready to shell Aug. 30th; dry and fully ripe Sept. 16th. Time, from the date of sowing to time of gathering for stringing, eighty-five days.

Large White Kidney Dwarf.—Sown May 20th; in flower July 29th; pods ready to string Aug. 25th; ready to shell Sept. 10th; dry and fully ripe Oct. 10th. Time, from the date of sowing to date of gathering for stringing, ninety-seven days.

From this table, it will be seen, that the China Dwarf and

Yellow Six Weeks are of about equal value as regards their earliness, but that the others, with the exception of the Mohawk, vary from *one* to *four* weeks in the period of their growth for stringing, and something more in the ripening of their crop. The season, last year, was wet and rather cool just after the beans were out of the ground, and, as the soil was rather stiff, they did not come forward so rapidly as they would have done in a more favorable situation. But for that, we presume the China Dwarf and Yellow Six Weeks would have produced pods for stringing in about six weeks.

There is considerable difference in the growth and habit of the different varieties above mentioned. The China dwarf produces its crop at once, and, in a week or two after, the pods are sufficiently full to shell, the whole of them are quite dry, and the vines ready to pull, thus clearing the ground at once for any other crop. The Yellow Six Weeks, on the contrary, though producing as early as the China Dwarf, ripen their crop gradually, and even when some of the pods are dry, there will be others but just beginning to fill up. This, too, is the case, in a greater or less degree, with the others, especially the Marrow. The Dwarf Horticultural is a fine variety, having all the excellence of the running kind, and fully as dwarf as the Cranberry; it is also a great bearer, and ripens in succession. It deserves to find a place in every garden. The large White Kidney is late, and keeps up the succession to the end of the season.

The cultivation of beans is so simple that we need say but little on this point. A light and not too rich a soil suits them best, and the situation should be one not liable to be oversaturated with moisture, which often causes mildew. It is not safe to plant too early, for a chilly night or two, just about the time the young plants emerge from the ground, will injure them, even if the temperature does not fall to the freezing point.

To amateurs who are desirous of an early crop, and do not mind a little extra labor, the mode of producing them which we advised for Lima Beans in a previous volume, II. p. 401,) may be recommended; this is, to sow the beans on inverted sods in an old hotbed, or in one in which there is not too great a heat; when the plants have put out their first rough

leaves, they may be planted out, if all danger of cold nights is past, though this is not very safe until the last part of May or first of June. The sods may then be removed carefully from the bed, and broken in pieces with one, two, or more plants upon each, and, the soil being prepared, they may be set out in rows, placing them sufficiently deep to earth up the stems, which will throw out fresh roots. In this way, they may be forwarded at least ten days.

ART. V. *On the Peculiarities of Foliage in the Camellia ; with some Remarks on the Deficiency of Coloring Matter in the Petals of many of the New Varieties.* By DR. J. S. GUNNELL, Washington, D. C.

DEAR SIR,—I have noticed, for eight or ten years past, that the young foliage (say when first expanding) of all the striped or punctata camellias, or such as have a white (or blush) ground, with red or pink stripes or spots, has presented, almost invariably, a striped or spotted appearance; that is, a light-green foliage, with darker green, or rather reddish spots and stripes interspersed on the foliage. This appearance I have frequently shown to gardeners and other persons who have been in my greenhouse during the spring, or early part of summer, when the camellias were making their young wood. But, last spring, I had about a dozen seedlings from one to four years old, that made a different appearance, in the foliage, from the above; in this case, the young foliage presented a reddish-green ground, (or dull green,) with deeper reddish-green (or maroon) stripes and spots interspersed. This peculiarity I pointed out to a number of persons, including amateurs and gardeners, and, at the same time, I remarked that I had no doubt but that we should have a new order or variety of this beautiful family. This season, one only of the foregoing seedling camellias has bloomed, and the flower has a ground color of a dark red, with deep crimson stripes and spots on the petals, and spots or dashes of white intermixed. The flower, of itself, possesses no great merit, being of irregular

form, somewhat like *Camellia eximia*, with a few stamens and an imperfect style, which will make it very desirable for the production of more perfect flowers of a new order of seedlings. The growth of the plant is vigorous, and the foliage handsome.

A few years ago, I had several seedling camellias, which blossomed with imperfect petals, that is, the petals were defective as to substance and coloring matter. Where the flower was of a red color, there were white stripes and white edges; the white, or whitish parts, being defective in substance, had a membranous appearance, instead of the fulness of petal of the best varieties: the coloring matter was also defective.

I have observed that all of the Chinese varieties of the camellia, so far as I have cultivated them, which have been introduced into our collections, have the substance of the coloring matter of the petals very perfect; but many of the English or European seedlings, and also several of our American varieties, have the substance of the petals and coloring matter both imperfect; so much so, in some kinds, that the edges and centre of many of the petals have a whitish and membranous appearance; for instance, *C. var. mutabilis*, Fielder's *Queen Victoria*, and sometimes *Victoria*, and others of the same character, (though I need not notice the American varieties which partake of the habit, for reasons unnecessary to mention.) I have, for some time, endeavored to ascertain the cause of this defect, but have yet been unable to do so. With the hope, however, that some of your correspondents might be able to communicate some information in relation to this subject, I have offered these few suggestions.

Washington, March, 1848.

Our correspondent, Dr. Gunnell, is a zealous amateur in the culture of the camellia, and he was the first to point out the peculiarity of growth in the camellia by which white or blush-colored varieties might be distinguished from red or crimson ones long before they flowered, as we long since noted, (Vol. VIII. p. 123.) His hints in regard to the peculiarity of growth in spotted or striped seedlings are, therefore, worthy of attention, and may lead to important and useful results.
—*Ed.*

ART. VI. *On the Cultivation of Torenia Asiatica.* By E. W.

THIS is a beautiful sub-shrubby plant introduced into England some years since, from the East Indies, and more recently into this country by other parties, it is presumed, besides the writer; but we do not remember to have seen any notice of it* in any of our horticultural periodicals, and we therefore propose to give a brief description of it, in the hope that others may be induced to introduce it and give it a more extensive trial; for, out of several plants imported in 1846, only one plant survived to bloom during the last summer and autumn, and this plant has recently been unfortunately destroyed by an accident, so that only two doubtful cuttings remain.

The plant is of a diffuse, branching habit, with quadrangular, flexible stems, bearing opposite ovate and serrated leaves, from the axils of which other branches are produced, and towards the tips of these shoots numerous flowers appear, usually on separate stalks, but sometimes several from the same axil. The shape of the flower is somewhat like that of a mimulus, the color principally a beautiful soft dark blue, or blue lilac of a peculiar and indescribable tint. It is divided into four lobes, upon each of which is a deep purple blotch, and the throat is of the same color, beautifully varied by a pale streak down the centre of the lower segment. Though originally supposed to be an annual plant, it is easily preserved through the winter in the greenhouse, and the same plants bloom as freely as the new cuttings the ensuing summer. It is easily propagated, flowers freely through the summer and autumnal months, so that it is a plant well calculated for bedding out.

From its East India origin, it was supposed to be very tender, and suitable only for stove cultivation, but, having been subsequently found in Alpine regions, and extended over a wide range of country, it was found to be possessed of much

* A full description of this beautiful plant will be found in our Floricultural Notices in our last volume, (XIII. p. 317,) but we were not aware of its introduction into our gardens, until the communication of our obliging correspondent came to hand. We hope he may so succeed in the management of his plants as to greatly extend its cultivation.—Ed.

hardihood of constitution, but it grows best in a rich light soil, and in rather a warm situation. We have thus given a brief description of a plant which we think well calculated for bedding out, or growing in masses, and of a color which we do not possess, and is a very desirable one for growing in beds, a mode which is becoming quite popular, and which produces a fine effect even with an ordinary flower. How beautiful, therefore, must the *Torènia asiatica* be, grown in this way!

Boston, March 20th, 1848.

ART. VII. *Epiphyllum Russellianum.* By P.

THE thanks of those, who have heretofore failed in cultivating this beautiful species of Cactus, are due to your correspondent, for his suggestions upon the subject. His name is such good authority, that I hardly like to give you the details of my culture,—this year very successful by some lucky accident, it may be.

I have observed that this cactus will absorb much more water in twenty-four hours, than any other variety that I have cultivated: and the quantity necessary to its healthy growth in the warm, dry atmosphere of a parlor, will oftentimes injure the texture of the plant at the root. This is easily avoided by engrafting upon the *triangularis*; and, at the same time, much more vigorous growth will be obtained than upon its own stem. My practice is, to graft all the tender varieties in this way.

In December, a fine plant produced *one flower*, sufficiently beautiful to answer the description in your magazine: the remainder of the buds soon after dropped. In January, a new crop appeared: and, about the first of February, I began to water with guano once a fortnight, and allowed the pan beneath the pot to contain water during most of the day. The result has been, that the plant has been beautifully decked with graceful and delicate blooms of the *Russellianum*, and there are a number of well-developed beds which are evidently going on in the same way.

In the soil, I placed no charcoal or lime rubbish; but in preparing the manure, or while it was decomposing, kept it carefully covered with sulphate of lime, thus converting the volatile ammonia into a fixed salt, and the sulphate of lime into a carbonate. To this cause, I ascribe a very unusual fertility in all my house-plants during the past winter: they have done better than when watered once a week with guano. By the way, would it not be better for horticulture and agriculture, if a part at least of the "*Plaster*" which is now so freely used, and sometimes so injudiciously, were thrown on the compost heap, instead of being "*planted*" in potato-hills?

While I am writing, I wish to recal to your mind, the variety of potatoes, which I have been raising for several years. I find the *sealsfoot* improve upon acquaintance. The crop is invariably large, fine-grained, and less likely to rot than any kind I am acquainted with. I have used no others since last October, although having Chenangoes and Batemans in my cellar.

Kingston, Mass., March, 1848.

We can add our testimony in favor of the excellence of the sealsfoot potato: we have ourselves been eating of this variety all winter, in preference to any other, not excepting the East-ports, which have hitherto been esteemed the best to be found in our market. We can also add, that it is exceedingly exempt from rot, for our crop, last year, suffered much less than the Chenango and several others.—*Ed.*

ART. VIII. *Anemone Japonica*; its Cultivation, Propagation, &c.; with an Engraving of the Flower. By the EDITOR.

AMONG the many fine acquisitions to our collections of plants made by Mr. Fortune in his expedition to China, the *Anemone japonica* (fig. 18,) holds a conspicuous place. Having somewhat the general appearance of the common garden anemone, it possesses a neat and ample foliage, and its flowers appear in terminal clusters on the tall stems which rise up above the

leaves. In addition to these, it has the valuable habit of blooming late in the autumn, when we have but few flowers to enliven the border, or render gay the conservatory or parlor. Dr. Lindley, in brief notice of it, thus describes it:—

“The Japan anemone produces its large purple semi-double blossoms in the months of October and November, at that moment when the gay flowers of summer begin to shrink from



Fig. 18. *Anemone Japonica*.

the cold and damp nights which the autumn brings in its train to England. A native of damp woods on the mountains of Japan, this hardy Asiatic disregards the chilly air of Great Britain, and all such rigor as it may meet there in winter. We have no frost that will harm it, no spring easterly winds capable of pinching it, no summer heat with power to scorch it; on the contrary, our climate is like its own, and it is as

certain to throw up its tufts of broad green leaves and autumnal flowers in England as on Mount Kifune. The plant is inferior to few of the verbenas, and to none of the petunias, as a border flower; it is superior in foliage; there is a long succession of its purple blossoms; and, as it produces seed without difficulty, it may be expected to sport into as many varieties, and to become as much improved by art, as the gay spring anemonies of Mesopotamia. 'To all this is to be added a surprising readiness to multiply, independent of seed.'

We have already noticed a fine specimen, (XIII. p. 496,) which flowered in our collection the past autumn. Though only a small plant of recent importation, it threw up several of its tall stems, terminated with its pale rosy semi-double flowers, which at once bespoke its beauty. Though our experience has only been with its cultivation as a greenhouse or conservatory plant, there is little doubt it will prove quite hardy in our climate.

To increase so desirable a plant was a principal object, but, as it made no branches, only throwing up its long leaf stems, division of the root appeared at first the only mode of accomplishing it; but we did not wish to do this until the plant had flowered. Upon close inspection of the root, however, we found that quite a number of young leaves were clustered around the base, and, at the next shift, the earth was slightly removed, disclosing a great number of eyes or buds breaking from the principal roots: these were carefully taken off, and, in a few weeks, they made stocky little plants.

With a view to render the growth of this plant familiar to all, that it might more speedily be generally introduced into our gardens, we began to prepare an article upon the subject; but, just as we commenced, the *Journal* of the Lond. Hort. Soc. was received, in which a full account of its treatment and propagation is given by Mr. Gordon, the superintendant of the hardy department of the garden. As it is as complete as any thing we could offer, we copy the entire article:—

"At page 61, Vol. I. of this *Journal*, will be found, amongst notices of new plants, some account of the Japan anemone. From want of a better acquaintance with the plant, it was, at that time, supposed to be best treated as a greenhouse plant. It has now, however, been ascertained to be perfectly hardy

under all circumstances, and it has proved itself to be one of the most desirable of herbaceous plants for autumn decoration, blooming, as it does profusely, from the middle of August to the end of October. It forms quite a rival for the purple Chinese chrysanthemum, its rosy purple semi-double flowers being each nearly three inches in diameter, and elevated to a height of two or more feet. It grows freely in almost any situation, and is easily increased by seed, or by dividing the old plants when in a dormant state, or it may be raised from small portions of roots, if treated thus :—

Any time in spring, before the old plants commence growing, shake or wash the soil clean from them, and afterwards cut their slender wire-like roots into small pieces, from half an inch to an inch in length ; and, having provided some pans or pots well drained, and filled with soil composed of sandy loam, peat, and well-decayed cow-dung, in equal parts, strew the small portions of the roots over the surface, and cover them lightly with silver sand ; then place the pots or pans in a frame or pit, where there is a gentle heat and plenty of moisture ; they will soon commence growing, and, by the beginning of May, will be ready for potting, singly, in 3-inch pots, which should be filled with the same kind of soil as before used, returning the plants to the pit or frame in order to recover the effects of the shift. Afterwards, when fairly established in the 3-inch pots, they should be removed to rather a shady situation out of doors, where they will grow rapidly, and, by the end of June, will again require shifting into larger pots ; or they may be planted out in the open beds, or borders, for blooming in autumn, observing, however, that, whether kept in pots or planted out, the strongest plants be selected, and, to be successful, it is essential that they have rich soil and plenty of moisture.

If the plants are intended for greenhouse or conservatory decoration during autumn, they should be treated as follows :— About the end of June, select some of the strongest plants in the 3-inch pots, and, having well drained some large pots, (42-inch,) place about six of the plants out of the 3-inch pots, at equal distances in each large pot, employing rich soil of the description already mentioned ; water freely, and place the plants in rather a shaded situation, afterwards treat them like

Chinese chrysanthemums, and finally, about the middle of August, remove them to the greenhouse or conservatory, where they will keep on blooming until succeeded by the chrysanthemums; in fact, the Japan anemone requires, if grown in pots, to be divided annually like the chrysanthemum.

If intended for open borders, the plants should be obtained from divisions of the old plants, taken off about the end of March, and not from small portions of the roots; for, if raised from the latter, the plants are never so strong, and seldom bloom well the first season. They should be planted out in May in a rich loamy soil, and afterwards freely supplied with water in very dry weather. When fairly established in the open border, they will require no more care, except removing and dividing them once every two or three years, otherwise they become tufts of leaves and weak shoots, and never bloom so finely or so abundantly as when removed and replanted at intervals.

Seeds are only produced by plants grown in the greenhouse, and therefore the plan of raising plants in this way is not worth time and trouble, except that there are chances of obtaining new varieties. I have but little doubt such may be obtained by hybridizing the Japan anemone with such kinds as the large white *Anemone vitifolia*, from the north of India, or the common garden *Anemone coronaria*, which may be had in bloom all the year by varying the season of planting, or even the beautiful yellow *Anemone palmata* might be made the male parent of a fine race of hybrids.

In such case, all the plants must be cultivated in pots, and regulated according to their time of blooming, so as to be brought into bloom at the same time as the Japan anemone, which is about the middle of August; it ripens its seeds about the beginning of November.

In collecting the seeds when ripe, care must be taken to gather them perfectly dry, and afterwards to place them where they will be out of the reach of damp until the following March, when they may be sown in pots or pans, lightly covered, and placed in a gentle, rather moist heat. The seeds will soon vegetate, and the young plants will be ready for potting off singly by the end of May. Afterwards, when

established, they should be transferred to the open air, where they may remain in 3-inch pots until October, when they should be wintered in a cold pit or frame, for they will not flower the first season from seed with any certainty. They may afterwards be treated like the old plants, but should never be allowed to become very dry, even in winter, for Dr. Siebold states, in his *Flora Japonica*, 'that they inhabit damp woods on the edges of rivulets on the mountains of Japan.' They suffer from drought more than from any thing else."

We would only remark that, in giving the plants a trial in the open border, good strong specimens should be selected, and a slight protection given of dry leaves, or strawy manure.

ART. IX. *Floricultural and Botanical Notices of New and Beautiful Plants figured in Foreign Periodicals; with Descriptions of those recently introduced to, or originated in, American Gardens.*

New Verbenas.—No tribe of plants possesses more valuable attractions, or has more admirers, than the *Verbena*; the facility with which it is raised from seed, as well as increased by cuttings, added to its gayness as a border plant, has rendered it one of the most popular flowers. New varieties are constantly produced, but it is no easy task to raise such as shall possess sufficient beauty to deserve a name. We are glad, therefore, to announce the production of a few seedlings, which are not only remarkably beautiful, but of a very distinct character; in another number we shall more fully describe them. *Exquisite* (*Barnes's*), a fine, bold flower, of a rich dark red, inclining to scarlet, with a large and very distinct pale yellow centre—extra. *Eximia*, a brilliant scarlet, with a small yellow eye. *Odorata*, delicate pink, with distinct rose centre, fragrant and beautiful. *Susanna* (*Weld's*), rich deep rose, with a scarlet centre, very distinct and fine. *McCullough's Seedling*, fulgent scarlet, very deep and rich. *Brunette*, very dark scarlet, with maroon eye, superb. *Eva*,

pale blush, with rosy centre, very large truss. *Grandissima*, (Hovey's), rich deep crimson, the finest of this color: with several other distinct varieties.

Campanula nobilis, which we have already noticed, (XIII, p. 498,) is now in full bloom in our collection, and is truly one of the finest of this showy family. The stems are about four feet high, much branched, and bearing upon each stem several of its nodding flowers, of larger size than the common bluebell, and almost as delicately dotted on the inside, as a foxglove. The plants have been wintered in the greenhouse, and commenced throwing up their flower-stems the latter part of January. It will be a great acquisition.

LIL'LIUM EX'MIUM *Courtin* Remarkable Lily. (*Liliidææ.*)
Japan.

A fine, half-hardy bulb; growing two and a half feet high; with white flowers; appearing in summer; increased by offsets. *Flore des Serres*, 1847, pl. 263.

Considerable confusion exists in the nomenclature of the different Japan lilies; and the present plant is known under three or four names, viz:—*japónicum*, *longiflorum*, *longiflorum* var. Several eminent botanists, according to Van Houtte's *Flora*, do not appear to have been at all acquainted with it, and it is not enumerated in Loudon's *Hortus Britannicus*. For its introduction, we are indebted to Dr. Siebold, who obtained it in his Japan expedition.

In the description, the points of difference between this and *longiflorum* are plainly pointed out. Its general appearance is like *longiflorum*, viz.:—with exquisite white flowers, slightly drooping, and very fragrant. It is doubtful whether it will prove perfectly hardy; its beauty, however, will always render it a favorite in fine collections of plants. (*Flore des Serres*, Nov.)

ÆSCHYNANTHUS LONGIFLORUS *Blume* Long-flowered *Æschynanthus*. (*Gesneridææ.*) Java.

A stove plant; of procumbent habit; with crimson flowers; appearing in summer; increased by cuttings; cultivated in leaf mould, peat and sand. *Flore des Serres*. 1847. pl. 298.

Several new species have been noticed in our last volume, (XIII), but few of them have yet been introduced. For a stove they are remarkably showy, with their fine heads of deep crimson flowers, but they will not thrive well in the ordinary

temperature of the greenhouse. This fine species, which differs but little from the others, except in its very large flowers, was found by Mr. T. Lobb, and merits speedy introduction into our gardens. (*Flore des Serres*, Nov.)

AQUILE'GIA LEPTOCERAS *Fischer and Meyer* Slender Spurred Aquilegia (*Ranunculacæ.*) Siberia.

A hardy perennial; growing six inches high; with pale blue flowers; appearing in summer; increased by seed and division of the root; cultivated in any good soil. *Flore des Serres*. 1847. pl. 286.

A fine addition to our hardy plants, having "a delicately cut foliage, large and showy flowers, and of such small stature as to merit the attention of amateurs, who wish one of the most agreeable ornaments for their parterre."

The *A. leptoceras* is a native of Siberia. It is of dwarf habit, with large, pale blue flowers, and forms a tuft of delicate green leaves, rising to the height of six or eight inches. Its foliage approaches to the *A. canadensis*, while, in the volume and form of the flowers, it resembles *vulgaris*: each stem bears two pendent blossoms. Any good soil will suit it, and it may be readily increased by division of the root or by seeds. (*Flore des Serres*, Dec.)

EDGWO'RTHIA CHRYSA'NTHA *Lindl.* Yellow Flowered Edgworthia. (*Thymelæcæ.*) China.

A half-hardy (or hardy) shrub; growing three or four feet high; with yellow flowers; appearing in spring; increased by layers or grafting; grown in any good soil. *Flore des Serres*. 1847. pl. 288.

A pretty little shrub, which will probably prove hardy in our climate, at least, south of Philadelphia. Mr. Fortune found it in the gardens at Chusan, and sent plants to the Horticultural Society in 1845, in whose garden it flowered, for the first time, in 1847. The leaves are oblong, lanceolate, of a dark green, and covered with a dense pubescence. The flowers, which are yellow, appear in semi-globular heads, similar to the daphne, and are, like that, exceedingly fragrant. Until it is proved to be hardy, it may be kept in a cold frame in winter, and should be grown in a compost of heath soil, loam and sand, and receive the same treatment as the daphne. It may be readily increased by grafting on the common mezereon. (*Flore des Serres*, Nov.)

REVIEWS.

ART. I. *Transactions of the Ohio Nurserymen and Fruit Growers Convention; held at Columbus, Sept. 29 and 30, 1847.* Pamphlet, pp. 46. Columbus, Ohio, 1847.

In our last number we noticed this pamphlet, and gave a brief description of several of the new apples, or such as appeared to be new, which are mentioned as having been exhibited before the convention. The nurserymen's convention was proposed by several cultivators in the West, for the purpose of bringing to notice some of the many seedling fruits which have been raised in that region, and a few of which may prove highly valuable, and also, "for the collecting together of specimen fruits from different parts of the State, in connection with the growers themselves, whereby some of the many errors that now abound, relating to names of fruit, might be corrected, and the various qualities of fruit, when grown at different points in the state, discussed." This object has, in some degree, been effected; and we do not doubt but an annual gathering of the most zealous cultivators of the West would do much to extricate our fruits, especially the apple, from the confusion which now so universally prevails in regard to the old fruits of the East, and the seedlings of the West.

A great deal of discussion took place in regard to the effect of soil, locality, &c., upon various fruits, and numerous specimens were presented for comparison, from different sections of Ohio, to prove this. Quite a correspondence was produced from several gentlemen, in relation to the origin of the Putnam Russet; and the letter of Dr. Barker, without any further evidence, is sufficient to show that it is identical with the Roxbury Russet. The substance of the letter is as follows; Mr. Putnam received a lot of scions from Connecticut, as early as 1796, a list of which has been given by us, (Vol. XIII. p. 106.) In 1806, Mr Putnam sent a great many barrels of his russets to market, and from this circumstance the bearing of the following extract will be understood:—

As early as 1806, Mr. P. had considerable quantities of apples for sale; (a portion were Russets, to my certain knowledge.) Now would it have

been possible for Mr. P., after his settlement in this county, to have raised from the seed a tree, brought to bearing, say at 6 or 8 years old, then from the cuttings of it procured others large enough to transplant as early as 1797 or 8? Then, recollect that an orchard produces but little fruit until set 6 or 8 years. But enough; you know my opinion has *always been*, without any indecision or wavering, that the "Putnam Russet," (so called in this region,) "Marietta Russet," or "Belpre Russet," was introduced from Connecticut, or some portion of New England, about 1776 or 1777, by Israel Putnam. It is now my opinion that it is the same as the "Roxbury Russet."

At the conclusion of the meeting, a committee, appointed for that purpose, reported the next convention be held at Columbus, Ohio, on the 27th of September, 1848. All members are requested to bring specimens of the most approved varieties of fruit grown in their counties or districts.

- ART. II. 1. *Address of Gen. James Tallmadge, delivered at Castle Garden, in the city of New York, at the close of the Twentieth Annual Fair of the American Institute, October 23d, 1847. Pamphlet. 8vo. pp. 16. New York. 1847.*
2. *Address, delivered at the Annual Meeting of the New York State Agricultural Society, at Albany, January 19, 1848. By JOHN P. NORTON, Prof. of Ag. Chemistry, Yale College, New Haven, Conn. Pamphlet. 8vo. pp. 24. Albany, 1848.*

These two addresses have been before us for some time, but no opportunity has offered for a brief review of them.

The address of Gen. Tallmadge, delivered before the American Institute, is replete with facts and arguments, showing the importance of encouragement to all the industrial arts. So varied are the subjects noticed, that we can scarcely find a paragraph, which, taken from the others, will show the spirit of the address. Free trade notions are briefly alluded to, and receive their due meed of censure. "Free trade," says the author, "never has, it never can exist, under any state of society; it is an *ignis fatuus* to delude and ruin."

In conclusion, the author alludes to the condition and pros-

pects of the Institute, and to the prejudices which exist in certain quarters relative to the success of its annual fairs. We close with this extract, merely expressing our surprise that any individual should deny the great benefits derived from the Institute and its exhibitions. It is an easy task to say what should be done; but, until those who object to what is already doing, propose something better, we are content to acknowledge the good example of the Institute:—

There is one more subject which, perhaps, in justice to the American Institute, should be noticed. It is this: an inquiry has been started by private individuals, and echoed by portions of the press, on seeing the unbounded success of our fairs,—“What is done with all the *money* received for entrance?”—and this is couched in the form of an insinuation. A short statement of the matter is due to the Institute. Whenever it has been my lot to preside over any institution,—as I have over this from nearly its commencement, until within a short period,—it has been the invariable rule of my life to examine, pencil in hand, the monetary and financial condition of that institution, and to look into the statements of its condition from time to time. This course I pursued while president of the American Institute, and I must say that, at no period since its commencement, has there been any defalcation or fraud in its management, and at no time an absent dollar. So far have these fairs augmented our funds for the good of the farmer, that, I candidly say to you, the Institute has now at interest about \$7,000, every cent of which awaits but the order of the Institute; and this they are not at all backward at giving, when *any good* is to be accomplished by it. The object is to sustain with it the current and necessary expenses of the institution, and, whenever the wisdom of the state shall come in aid, perhaps to establish an agricultural school.

The address of Mr. Norton, before the N. Y. State Society, is upon agricultural chemistry, and is mainly devoted to an elucidation of the general connections of science with agriculture.

With but few preliminary observations, the author first explains the terms organic and inorganic, as applied to soils, and gives a statement of the different substances,—eleven in number,—which compose these soils. Next, he treats upon plants which are organic and inorganic, and shows, by an analysis of the ash, or inorganic part, of several root and grain crops, what substances are usually present in a very fertile soil. They are potash, soda, lime, magnesia, oxide of iron, phosphoric acid, sulphuric acid, chlorine, and silica. “All of the inorganic part of the plant,” says the author,

"comes from the soil; the air cannot partially compensate for the poverty of the earth, as it does in the organic part. Hence, it is necessary that the soil be well supplied."

Following upon this theory, the address is so connected, that we could convey but little of its great interest without a long quotation. The striking efficacy of lime on some soils, its injurious effects on others, and the want of fertility of lands well supplied with farm-yard manure, are fully explained, and are of the greatest interest to every farmer.

Mr. Norton fully estimates the value of experience to all cultivators, while, at the same time, he shows how slow must be all progress, when guided by practice alone:—

I would not for an instant be thought to undervalue practical experience; its results have been great and important, and, in many cases, science has only followed to explain what experience has before discovered. But the process of discovery by experiment alone, is always painfully slow, because the experimenter has no clear perceptions to guide him. In many cases, errors and inexplicable differences of opinion arise, because results of an opposite character are obtained by individuals in the same neighborhood.

I once attended a meeting of a farmer's club, in Ayrshire, Scotland, where the subject of discussion was lime. All were from the same neighborhood, and all had used lime, but scarcely any two agreed in their estimation of its effects. Some considered it one of the most valuable manures employed, and others condemned it entirely. The discussion was perfectly unsatisfactory in its termination, each person being only confirmed in his own opinion. The true explanation of their differences consisted in the fact, that the soils of their district were derived from the decomposition of two species of rock, the one of which abounded in lime, while the other was almost entirely destitute. This was a case in which experience gave no information as to the course most advisable in individual cases. Expensive experiments were necessary in each instance, and, after all this expenditure of time and money, no general or useful result was arrived at. But, on the other hand, theory alone is almost as objectionable as practice alone. Results obtained in the laboratory, or on paper, are by no means to be considered as applicable to practice, until tested by experience. Ignorance of this fact has led some of the most eminent philosophers into deplorable errors, and has caused many practical men to regard scientific agriculture as but another name for quackery. The only true course is to unite practice and theory, guiding and explaining each by the other. The utmost possible advance would then be made in both directions, because all experiments would be for definite ends, and guided by clear, intelligent views.

There are too many of our gardeners and amateurs, whose

experience, though often leading to successful results, would attain their objects in a speedier manner, if guided by that aid which science will ever afford.

The distribution of Mr. Norton's address must awaken a deep interest in the important subject of agricultural chemistry.

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Japan Liliums.—If half the attention was paid to the cultivation of Liliums that is paid to the tulip, we might expect the most splendid results from crossing. Independently of crosses, the great diversity in their forms, and their various seasons of flowering, must render them of greater value than even a tulip bed. A person may enjoy a bed of lilies for several months, which cannot be the case with tulips. The plan which I should propose for those who wish to grow Liliums to perfection is this:—A bed should be formed proportioned to the number that the grower has got to plant. The common soil should be taken out to the depth of three feet; and it should be filled up with the following compost:—Two barrow loads of turfy loam from a pasture field, with an equal portion of turfy peat; to these, add one barrow load of leaf soil, and also an equal portion of sharp sand, with one barrow load of well rotted manure, and so on in proportion, till such time as you have got as much together as will fill the bed. Let all this be thrown up into a heap for a year before it is wanted, and frequently turned in the course of that time. If the bottom is wet, it would be well to fill up the bed one foot with broken stone, and to lay upon that turf, with the grassy side upwards, as it will not rot so soon as if it was turned downwards. Over this should be laid six inches of well rotted manure. With a dry bottom, it will require no stone, but only laying the manure at the bottom of the bed. The bed should then be filled up, to about two feet and a half, with the compost before mentioned. After it is filled in, it should remain for about a fortnight before it is planted; so that the soil may get well settled down. The roots should be planted as early in January as the weather will admit. The planting of them should commence with the tallest towards the top of the bed, and so on till you reach the bottom of the bed with the lowest species. The crowns should be six inches below the surface when planted. When finished planting, the bed should be hooped over and covered with mats every night, and every day that is frosty; but every fine day the mats should be taken off, and even when raining, as the rain will do them no harm, but good. The mats should be put on as long as there is any appearance of frost. I should have said that, when planting, it would be necessary to put a little sand around

and also over the tops of the bulbs, the same as is done with tulips. It will also be necessary to have a covering for the bed, so that the plants when in flower may be protected from heavy rains and cold cutting winds; and also, to protect the late-flowering ones, it will be proper to proportion the distance to the size that the plants grow to when planting; for some of the species will require a foot in the row, and a foot between the rows, and some of them more. As soon as the plants are all done flowering, it will be necessary to take them up, and throw out the soil that is in the bed, that it may get the benefit of the air and rain, so as to sweeten it, and prepare it again for the following season; and, when filling it in, it should have some more manure put at the bottom of the bed, and also some fresh compost should be added. When the bulbs are taken up, they should be put into a cool and dry place, and covered over with dry sphagnum, or bog moss, as that will keep them fresh and healthy. The planting should again take place in January, as before; and so on with them every year. It will be necessary to take away all the small bulbs from the flowering ones before planting; and, by following this plan, I am confident that a most beautiful show of flowers will be got. I should have mentioned, that a bed should be formed for the young bulbs, to get them on to a flowering state, so that they may be ready to be put in, if any of the flowering bulbs should die; and also to forward any of those that are rare. They should not be taken up till they are in a flowering state: they should then be treated the same as those in the flowering bed are.—(*Gard. Journ.* 1848, p. 23.)

Roses for Winter Decoration.—The tribe of roses affords a variety of plants which may be had in bloom all the year round, if a sufficient stock of them is obtained. I would recommend that all roses intended for forcing should be grown upon their own roots, especially the Bourbons, Chinese, and Tea-scented varieties; for this reason, that they throw up strong shoots, and bring upon these shoots large clusters of flowers. These tribes furnish the best kinds to force in the early part of the season. The autumnal roses in the open garden are over towards the end of November; the earliest forcing ones may be had to succeed them, and a succession may be kept up until the roses in the open garden again succeed the forced ones.

The system I have adopted to obtain this succession of flowers is as follows:—I obtain a quantity of strong healthy young plants, of the tribes Bourbon, Chinese, and Tea-scented. I pot them early in the spring, giving them tolerably good-size pots; and as the season advances, they begin to put forth their bloom buds, which I keep constantly picked off until towards the autumn. This induces them to throw up strong shoots, and likewise strengthens the plants. When the frosts begin to set in, I remove them into a cold pit, and take them out for forcing as I require them; always choosing first those that are likely to come into bloom the soonest. By this means I keep up a succession of these tribes of roses until I get the Moss, Provence, Perpetual, and Hybrid Perpetual varieties into bloom; these latter tribes are much more difficult to force early in the winter than those before mentioned. I treat these similarly to the Chinese during the summer; they are, of course, cut back in the autumn, and kept dry until introduced into the for-

cing house, when a partial watering is given them, increasing the quantity according to the demands of the plant. The more the plants are forced, the greater degree of hardening off they require, such as placing them in a greenhouse, &c., for a day or two before introducing them into the drawing-room ; otherwise, they are liable to droop the first day or so. I should remark that I always keep the pots upon racks when out of doors or in the pits ; this prevents the worms from getting into the pots. The soil that I pot them in is rich sandy loam, with plenty of drainage at the bottom of the pots.—(*Gard. Journ.*, 1848, p. 21.)

Bleeding of Vines.—The vine is very apt to bleed greatly in the spring, if the winter pruning be deferred to but a very short time after the commencement of the year, if no severity of frost follows to deaden the pores where cut through. It remains at present a somewhat disputed question whether such bleeding be injurious to the vine, but the writer thinks it ought to be avoided if possible ; and he does not hold it to be absolutely necessary to accomplish the necessary pruning before the spring shoots appear ; for he has, in many cases, chosen, in order to avoid causing the bleeding, to leave a vine quite unpruned till the buds began to push themselves into shoots ; and, as the vine has shown its disposition to extend itself by each upper shoot, he has pinched off that shoot below its first joint, taking care not to wound, in the slightest degree, the wood of the past year, which would occasion bleeding. This he has done till he has brought the vine exactly into that state, as to bearing buds, which he would have done if he had accomplished the pruning at or before Christmas ; and has got, by this dilatory process, oftentimes, a very good crop. The only disadvantage seems to be that many rather unsightly ends of the last year's shoots, bared of their buds, must be left till about the third week of June, when they may, as well as even far older wood, be cut away without occasioning any or but the slightest bleeding. The bleeding in April and May, in a vigorous vine, is such, that it seems to defy the utmost art of surgery to stanch it. Some say that it may be stanchd by burning the end of a shoot, and then applying thereon hot sealing-wax ; but even this, the writer has tried without success ; and certainly, the burning alone is not sufficient, as, where the burning ends, there the bleeding takes place. The bleeding seems to be conducted according to the order following. In about the end of March, the vine will bleed throughout a few of the middle hours of the day, when the sun shines powerfully, and the wind is in a warm quarter ; but, during the night, the bleeding ceases. About the middle of April to the middle of May, the bleeding takes place considerably and incessantly, both by day and night. In the end of May and beginning of June, the bleeding stops by day and takes place in the night. Towards the end of June, when the shoots and bunches are contending against each other most strenuously by day and night for each drop of sap, there seems to be no longer room for any waste of sap by bleeding. Such is what the writer believes to be the order of the vine's bleeding.—(*Gard. Journ.*, 1847, p. 311.)

Greenhouse Azaleas for Winter Decoration.—The production of flowers for the drawing-room during the dark, dull, cheerless, and dreary months

of autumn and winter, forms, nowadays, no inconsiderable share of the labors of the gardener. Among the plants which are adapted for this purpose, the beautiful genus *Azalea* stands preëminent. The splendor and beauty of the flowers, the variety and richness of the colors, the vast profusion of the blossoms, the length of time the bloom remains in perfection on the plants, and the little care and labor required in growing them, all combine to entitle it justly to rank foremost amongst forcing plants for the drawing-room, &c.

I allude, at present, principally to the many charming varieties of the lovely *A. indica*. Among these, we have whites, purples, and scarlets of all shades, thus affording the most pleasing variety. No plants are more easily got into bloom early in autumn than the varieties of *A. indica*. They only require to be set growing early in spring, so that they may set their buds in the commencement of the summer; by this means, the wood becomes thoroughly ripened, and the buds well matured. And this is a most important point; for, without well ripened wood and properly matured buds, we cannot expect to have a fine bloom. If the wood is well ripened, and the buds well set, the plants will be benefited by being set out in the open air in the latter part of August and the beginning of September, and they will then be in a fit state to force into bloom at any time they may be wanted. Some kinds are better fitted for forcing than others. The old *A. indica alba* is one of the best to commence with; I have seen it beautifully in bloom the first week in November. Next to *A. indica alba*, is the *A. indica phœnicea*, and *phœnicea grandiflora*; then Smith's *coccinea*, and, after it, any of the other varieties. I have seen many of the finest sorts in flower at Christmas. The lovely *A. i. variegata* is well suited for this purpose, as is also the pretty *A. i. exquisita*; indeed, the whole of this beautiful genus. As decorations for the drawing-room, they possess other advantages, besides those already enumerated, over most hard-wooded plants. In the dry atmosphere of a drawing-room, they remain, for the space of six weeks or more, a perfect blaze of floral grandeur; and the plants come out, if they have been properly attended to in watering, in as good health as when they were taken in. Many other hard-wooded plants drop their flowers in the dry atmosphere of dwellings; but not so with the azalea. They appear quite at home there. Indeed, I have seen many of the delicate-flowered sorts more beautiful at Christmas in the drawing-room; than I have seen the same sorts in May. It is well known that many of the delicate flowered varieties suffer from the effects of the sun in May. Now, these very kinds in winter have their corollas uninjured, and the colors in perfect beauty. After the plants are once forced, they are ready to be set growing in the spring; they then have all the summer to ripen their wood and set their buds, and, in the autumn, they will be well fitted for forcing, when they will repay tenfold any little trouble bestowed on them.

No group of plants deserves to be so extensively cultivated as this class of azaleas. By introducing a plant or two at a time into heat, they can be had in bloom from November to June, inclusive.—(*Gard. Journ.*, 1847, p. 324.)

Pruning Heaths.—Before the heath-grower has recourse to the knife, he must determine which of two objects he intends to effect,—to improve the natural habit of his plant, or to induce a perfectly artificial one. By the former, he procures the greatest amount of fine blooming branches, and, at the same time, preserves the natural characteristics of the plants; by the latter, a beautifully symmetrical plant, with its natural character destroyed, is obtained, and with what would have been noble masses of bloom broken into a host of small spikelets. The prevailing practice of tying and clipping a plant into a perfect pyramid is, I conceive, at variance with good taste, sacrificing, as it does in many instances, noble bearing, graceful and picturesque outline, at the shrine of unmeaning formality. Gardeners who profess to take Nature as their preceptress would better illustrate her precepts by improving than by creating.

There are many heaths which never require the knife. Their natural disposition of growth is such that its application would mar instead of improve them. Of such may be instanced tricolor, Banksiana, aristata, its varieties and allies. These are only instanced at random to illustrate the method of growth alluded to. They are naturally bushy and symmetrical, but without artificial formality. The vestitas are disposed to grow naked; they can be improved by the judicious application of the knife, but to tie and cramp them into pyramids is to destroy the noble appearance they would otherwise assume. Again, pyramidalis, trossula, persoluta, Willmorei, Pattersoniana, admit of an extensive use of the knife. Some, as cerinthoides and its varieties, with costata superba, exhibit peculiarities of growth unperceived in any others. The former is continually throwing out young shoots from its collar; stem, it cannot lay claim to any. The latter throws up blooming shoots twelve or eighteen inches in height, bearing whorls of bloom at intervals of four or five inches. Cerinthoides can, at any time, be induced to form a bushy plant by cutting it down to the Cycas-like protuberance at the collar. With aristata superba little can be done besides cutting off the blooming stalks immediately after flowering, as its disposition of growth does not admit of the use of the knife in its adult state.

There are two periods of heath-pruning. In each, a different object being in view, the principle of pruning must, of course, be varied. In the one case, the object is to form the plant; in the other, to induce it to produce bloom. The foundation of the future plant can, in the majority of cases, be formed in one season, if pruning is necessary. If the species be of the kind not admitting the knife, it will form itself; but of these we have nothing to do at present. Presuming a plant is well formed and full of promise for future excellence, it now arises, how can it be induced to retain the character and reward us by a rich display of bloom. When a heath has produced its bloom for the season, it immediately commences producing wood for the next period of blooming. And as the heath, in common with many genera to which it is allied, increases its growth in the main by the simple elongation of the growing points, or by laterals near those extremities, and as the foliage is permanently cast from the wood of more than two seasons' growth, it follows that, if shoots of eight or ten inches in length are left from year to

year, the appearance of the plant will be any thing but pleasing after a few seasons' growth. As soon as possible after the flowers begin to fade on the free growing kinds, bring the knife into requisition ; and, in the use of it, some little practice is necessary, not so much in the mere mechanical application as in judging of the most suitable places in which to apply it. Physiology teaches us, and the theory is correct, that those parts of a plant possessing the greatest amount of fully organized cellular tissue, or that substance from which all the several parts of a plant, including the reproductive system, derive their formation and nourishment, will produce the most perfect branches, if means are taken for their proper development. It follows that the pruning of any given shoot should take place precisely at the point exhibiting these characteristics in the highest development. This being done, the otherwise dormant buds in the immediate vicinity of the incision will immediately start into activity, and the result will be strong and vigorous shoots, which, if left untouched, will continue to grow up to the expansion of their flower-buds. In fact, a heath can scarcely ever be said to be wholly inert ; for, except when under the liberal application of the knife, when of course the system receives a partial check, it is perpetually growing.

I have said, if the shoots produced after pruning are left to themselves, they will continue elongating till the flowers begin to expand. Now, in many cases, and in the formation of the formal specimens before alluded to, it is indispensable that these shoots should again be topped ; the result is for every shoot which, if left untopped till after blooming, would have produced nine or twelve inches in length adorned with bloom, three or four inches each occupy its place, producing a more bushy and pyramidal plant, it is true, but far deficient in nobleness of appearance.

In conclusion, I would say, never prune beyond the current season's growth : if so, the result will be puny and sterile shoots, a prey to insects and such as will never reward you with a creditable bloom. I ought to mention that, in pruning *E. Mirabilis*, great caution is necessary, if, indeed, it should be pruned at all ; blooming, as it does, the whole season, it is apt to exhaust itself, producing blooms at the top of nearly every shoot when scarcely an inch in length. The tendency should be checked by pinching off a portion of the flowering tops immediately they can be recognized, which is all that can be done in the way of pruning it. In those species which never require the knife, the blooms, immediately they begin to fade, should be removed. As they are invariably produced at the points of the shoots, great care is necessary that the bud, from which the future shoot is to spring, is not injured or destroyed in performing the operation. The best apparatus is a sharp pair of scissors. If the bud is injured, no bloom is produced the following season.—(*Gard. Chron.*, 1848, pp. 171, 172.)

Asparagus.—The notice in your Calendar of Operations last week, that "asparagus beds must be manured and pricked over," reminds me of an intention, formed long ago, of offering a remark or two on the general management of asparagus beds, which I now ask permission to do.

I am not aware that any writer has ever attempted to explain how it is that the market gardener and the gentleman's gardener differ so very widely

in their mode of treating asparagus. The former makes it a rule to cover, early in spring, the surface of his beds, to a considerable depth, with earth taken from the alleys between them, leaving the top of each smooth and flat; in which form they remain throughout the growing season. A similar operation is performed annually by the latter, but he chooses autumn as the time for it; and, in the spring, he forks the soil off again, leaving his beds in the shape of a half cylinder, with the convex side presented to the sun.

Now, if it be admitted that any advantage is derivable from covering up at all, I contend that it is secured by the market gardener's plan alone. He, by covering at this time of the year, places the crowns of his plants in a temperature far more congenial to healthy vegetation than that to which the alternations of April's daily sunshine and nightly frost subject those lying barely beneath the surface of the ground. Not less advantageous is it to the plants, as the season advances, to have their roots protected from the direct influence of the solar rays, whose exciting tendency is to force the whole crop at once to maturity, leaving nothing for the latter part of the asparagus season but small, and therefore almost worthless, shoots. As a regulator of heat, then, we must, I think, acknowledge this covering to be exceedingly valuable; but this is not its only, or, indeed, most important office; it prevents the rapid abstraction of moisture from about the roots, which would otherwise take place, just at the time when the nature of the plant most of all demands it.

Now, on the other hand, what, I ask, can be said in favor of covering in winter? Is artificial covering necessary to an indigenous plant whose natural hardihood art has not impaired? Of what value is manure (if that be urged as a reason for covering the beds in autumn) to a plant at a time when its functions are suspended, and therefore its assimilation of the elements of manure impossible? And, lastly, why should the surface of the beds be kept flat at that time of the year only when rain is most abundant and least serviceable? In submitting these questions to those of your readers to whom they may apply, I beg respectfully to inform them that I have not taken a mere theoretical or superficial view of the subject: I have fairly tried both plans, and for several years, from which experience I pronounce that of the market gardeners to be immeasurably superior to the other.—(*Gard. Chron.*, 1848, p. 172.)

Pears on Quince Stocks.—I must refer your correspondent "Abdalonymus" to my reply to "Constant Reader," given at p. 372, 1847; he will there find the results of my experience, which will spare my pen, but I feel that I ought to firmly contradict his assertion—"It is a fact, that few sorts of pears will grow immediately on quince stocks." I can give him a list of more than 200 sorts that grow freely without double working. The Virgo-leuse pear is very inferior to other sorts, the names of which I have given in the letter above referred to for double working; for walls or espaliers they are not "useless;" let "Abdalonymus" go to Mr. Thompson, at the Chiswick Gardens, and ask him to show him the fine trees in the west wall there, some 25 years old, and looking as if they would live for a century. Some of our finest old varieties of pear, such as the Crassane and

Colmar, most certainly require a wall to bring them to perfection, as is also the case in the northern departments of France, and in Belgium; but our best new varieties give the very finest fruit from pyramidal trees on the quince stock.

It is not a fact "that pears are far more liable to canker upon quince stocks than upon their own;" quite the contrary, as I can prove to "Abdalonimus," if he will come and see me. Very many sorts that canker and are unfruitful here, when grafted on the pear stock, are fruitful and healthy in the highest degree when worked on the quince. I will here venture to repeat what I have before written in your pages, that the "Louise Bonne, of Jersey," grafted on the pear here, and growing in a light sandy loam, seldom or never bears clean fruit; they are always spotted and diseased, and its shoots are often cankered and unhealthy. I have this month taken off the heads, for the purpose of re-grafting some fine trees 15 years old, on this account, and have just finished a plantation of 2000 trees of this sort on the quince to grow fruit for Covent-garden market, only because it does so well. Your correspondent does not give any account of his experience; his letter seems to me all empty assertion.

Pears upon quince stocks do not "require several years before they come into a bearing state;" they often bear the second year from the bud or graft, and the third year they will bear abundantly. I am not at all surprised at your correspondent being "completely" baffled; he has not persevered as I have. The fruit from pyramidal trees on the quince occasionally root-pruned is not "small and deficient in juice;" the finest-flavored pears I have ever tasted, in this country and in France, have been the produce of trees of this description; there is always much more piquancy of flavor than in pears from walls. I can state rather a stubborn fact in support of this. I sent last October some sieves of Louise Bonne of Jersey, to Covent-garden market. My salesman reported to me that "they were the best he had ever seen or tasted."

Now, as to duration: "to die in a few years" will not be the fate of trees worked on the quince; witness the healthy trees in the gardens of the Horticultural Society at Chiswick, which are now more than 20 years old. I have seen trees on the continent more than 40 years old equally healthy. Surely this is enough of duration for any garden trees, and for any man of moderate wishes.—(*Gard. Chron.*, 1848, p. 100.)

ART. II. Domestic Notices.

New York State Agricultural Society.—The list of premiums for the next annual Fair, to be held at Buffalo, September next, is published in the *Albany Journal*, and we shall endeavor to find room for that portion of it relating to Fruits and Flowers, in our next. The facilities of communication by

railroad, will, no doubt, induce some of our gardeners and amateurs, to contribute to the exhibition. It is intended to have, during the week of the fair, a meeting of Pomologists from different parts of the Union, and Canadas, of which due notice will be given in the Agricultural Journals.

Burlington Horticultural Society.—We have received a copy of the report of the committee of this society, with a list of the premiums awarded the last year (1847,) which we copy:—

NURSERIES, FRUIT AND FOREST TREES.

The Committee on Nurseries, Fruit, and Forest Trees report:—That they have not been notified to examine any nurseries, but feel at liberty to state, generally, that the growing of seedling fruit trees, especially the apple, and such other hardy trees and vines as are suited to our soil and climate, has attracted the attention of several of our citizens, and ere long the demand, though greatly increasing, will meet with a supply of such as are grown in our own immediate vicinity, which will furnish us with more hardy trees, and that probably at a cheaper rate than they can be obtained at the South.

We have examined the orchards, and fruit gardens of such as have requested, and although the number, offered for premium is somewhat limited, yet we are happy to say, that our examinations fully prove to us, that we have a superior fruit-growing section—that nature has done her part, and all that remains to secure the luxury and profit of choice, abundant, and varied fruits, is for us to do ours. Even the eastern part of our county, lying near the range of the Green Mountains, will, with proper attention, produce most of the varieties, but especially the apple, which is of more value than all others, in great abundance. We examined the orchard of Mr. Samuel Wells, in the easterly part of Underhill, lying near the foot of the highest elevation in the state. This orchard contains about three acres of ground, well stocked with trees, most of which are now in bearing, and they present a very healthy and vigorous growth. The orchard stands upon a southern exposure, on a loamy soil, interspersed with loose stone and strata of mica slate, the latter appearing in many places at the surface. The trees are set with less attention to mathematical lines than to a position best suited to supply the roots with proper mould, moisture, and nutriment. It is nearly all grafted, and now produces an abundant supply of many of the best varieties of apples. This case may well be noticed to prove, that, on a like soil, of which most of the east part of our county is composed, this most valuable fruit may be grown. Mr. Wells has once drawn a premium on this orchard, we now award to him a diploma of the Society.

We have examined the orchard and fruit garden of Chauncey Goodrich, of Burlington, and find that it contains a great variety of fruits and trees—also a variety as to age and size. Old trees, that most persons would have regarded as of no value but for fire wood, and that would have been cut down and removed as cumbrous to the ground, are renovated and now laden with choice fruits. Some with hollow trunks, others with one side decayed or perhaps with a thin rind or part circle of bark or sap-wood only remain-

ing, by a course of enriching the ground, scraping, trimming, and engrafting, seem to have sprung into new life, and are now truly interesting and prolific bearers. The method of trimming this orchard may be regarded as worthy of notice and imitation. Large limbs, when attached to the trunk so as not to be in danger of splitting down, however near the ground, are permitted to remain. The process of trimming is pursued gradually by removing dead or decaying branches as they may appear, and small limbs from the extremities of the branches, when found too thick to ripen the fruit. Orchards are often injured, and many times wholly destroyed, by cutting off large limbs and trimming up the trunks of the trees, with a view to get a symmetrical or well proportioned top. This orchard contains the greatest variety of apples we have found, many of which are newly introduced into the country, and are of superior excellence. Mr. Goodrich also has a fine variety of pears and plums, with grapes and smaller fruits. We therefore award to him the premium of \$5 00 for the best orchard and fruit garden, taken as a whole, that came under our examination.

The fruit gardens of Prof. J. Torrey, Sion E. Howard, and John N. Pomeroy, Esq., are rich treats for the horticulturist to visit. Each of these gentlemen literally "sits under his own vine and fig-tree." The garden of Professor Torrey is peculiar for its rare and choice varieties, and to him are the public indebted for the *introduction* of many of these varieties. His apples, pears, plums, and grapes, are all selected, and the trees and vines trained under the rules that book-knowledge, derived from experience and science, fruits out. The result of such training is made manifest in the superiority of the fruits produced; and may serve as a practical hint, that not only Horticulture, but Agriculture, in all its branches, may be greatly improved by the application of rules, based upon the same lights of experience and science.

The garden of Mr. Howard, although presenting a fine variety of grapes, pears, and plums, is more to be distinguished for its number and variety of peaches. Here are peach trees that have been twelve years standing, and were brought from New York, and set at three years old, making the age of the trees fifteen years. They have borne more or less fruit every year since they were set except the first, and are now bending to the ground under the burden of their delicious products. Although the peach has been regarded as unsuited to our climate, and most experiments have failed to produce it here, yet in this garden, under the care and attention of Mr. Howard's own hand, may be seen from twenty to twenty-five bushels of this rare fruit, ripe, and ripening. The trees stand in a southern exposure, and are protected from the north and west winds by the garden wall and buildings. Every year they have been attacked by the peach-borer; but this insect has been carefully cut out with the knife and destroyed. The arbors, trellises, and walls around this garden are covered with luxuriant vines, hung with rich and fragrant clusters of grapes. Grapes are easily cultivated, and form the greatest luxury in the whole catalogue of fruits; and no man who has a square rod of ground unoccupied by buildings, should be without them.

Mr. Pomeroy has a fine variety of pears and grapes. Among his pears,

may be found the Bartlett, Gansell's Bergamot, Bon Chrétien, Seckel, White Doyenné or Virgalieu, Pászé Colmar, St. Germain, and other choice varieties. Of foreign grapes, he has the Black Hamburgh, Miller's Burgundy, Golden Chasselas, Esperione, White Sweet Water, &c. Of natives, the Catawba, Isabella, and what is known in this locality by the name of the Foote Grape, an early and rich variety; also the Lyman Grape, the most hardy and prolific of all grapes, and perhaps the most worthy of cultivation in our climate. These fruit gardens of Messrs. Torrey, Howard and Pomeroy are all worthy of notice and commendation. Yet we have seen no orchard or fruit garden but what might and should be greatly improved. We allow to each of these gentlemen, in lieu of premiums, a copy of Gardner's Farmers' Dictionary. We have not been called upon to examine any forest trees.—*David Read, for the Committee.*

Fruits and Vegetables.

The Committee on Fruits and Vegetables report the following awards:—

To Joseph Torrey, of Burlington, for the best <i>new</i> variety of Fall Apples, the Gravenstein,	-	-	-	-	\$ 1 00
To Joseph Torrey, for the best <i>new</i> variety of Winter Apples, to wit,—the "Jonathan,"	-	-	-	-	1 00
To Chauncey Goodrich, for the best five sorts of Winter Apples—the Hubbardston Nonsuch, Baldwin, Danvers Winter Sweet, Roxbury Russet, and Rhode Island Greening,	-	-	-	-	1 00
To Samuel Wells, of Underhill, for 2d best do.,	-	-	-	-	50
To C. Goodrich, for five best sorts of Fall Apples—the Porter, Gravenstein, Scarlet Nonpareil, Fameuse, and new Baking Sweet,	-	-	-	-	1 00
To C. Goodrich, for the greatest variety of Apples—55 sorts,	-	-	-	-	2 00
To John N. Pomeroy, for the best five varieties of Fall Pears—the Williams's Bon Chrétien, St. Michael's, Gansell's Bergamot, Seckel, and Van Ness,	-	-	-	-	1 00
To Joseph Torrey, for the best <i>new</i> variety of Fall Pear—Belle Lucrative,	-	-	-	-	1 00
To John N. Pomeroy, for the two best sorts of Winter Pears—St. Germain, and Pound Pear,	-	-	-	-	1 00
To Joseph Torrey, for the best <i>new</i> variety of Winter Pear—Beurré Diel,	-	-	-	-	1 00
To Chauncey Goodrich, for the best <i>new</i> variety of Plums—the "Lombard,"	-	-	-	-	1 00
To William H. Wilkins, for the best seedling Peach,	-	-	-	-	1 00
To Mrs. Z. Thompson, for the 2d best do.,	-	-	-	-	50
To James W. Hickok, for the two best specimens of Grapes, requiring protection in winter—Miller's Burgundy, and Sweet-water,	-	-	-	-	1 00
To Byron Stevens, of Essex, for the best specimen of hardy Grapes, the "Lyman,"	-	-	-	-	1 00
To Chauncey Goodrich, for the greatest variety of Fruit grown by one individual, to wit:—55 sorts of apples, 11 of pears, 11 of plums, 6 of grapes, and 3 of peaches,	-	-	-	-	2 00

To Mrs. Hannah Thomas, for a basket of assorted Apples, containing many new varieties, introduced by the late Col. Thomas, from Canada,				Diploma.
To N. A. Tucker, for the 6 best Cabbages,	-	-	-	50
To H. B. Stacy, for the 6 best Pumpkins,	-	-	-	50
To Rev. J. K. Converse, for the 6 best Squashes,	-	-	-	50
To N. Stevens, for the 6 best Water Melons,	-	-	-	50
To Usual Pierson, for 2d best do. do.	-	-	-	25

Montreal Horticultural Society.—The first annual report of the directors of this new society has been forwarded to us, and we are gratified in seeing the association organized under such good auspices as it appears to have been from the report; according to a statement of the Treasurer, the sum of £22, Canada currency, was awarded in premiums last year; from subscriptions and exhibition fees, was only £94. The annual exhibition in September last was well attended, and there were upwards of 1500 articles displayed for competition. The greenhouse plants were numerous, and the splendid show of fruit deserving of notice. Appended to the report is a list of premiums to be awarded in 1848, and a list of the members of the society. We wish it every success.

Severity of the Winter.—The winter just passed, though much above the average temperature, has, notwithstanding, been unusually severe upon many kinds of fruit trees. In our grounds, where, for six years, we have never seen a pear tree in the least injured, some have been killed quite down to the graft; others are partially injured so as to require heading in; these remarks, however, apply principally to trees of a year's growth; but, among plums, even trees two or three years from the graft have been somewhat injured. But, singular as it may seem, though pear and plum trees have suffered, evergreens have wintered unusually well; arbor vitæ, which suffered last year, never looked better; and rhododendrons, which, every winter, have had their fine foliage more or less blackened, appear as fresh as in the fall of the year. The mild weather of December and January, alternated with sudden changes to severe cold, with the thermometer at 12° below zero, has undoubtedly produced the effects we have alluded to.

Pomological Rules.—We have been highly pleased to learn, during a late visit to New York and Philadelphia, that our article in our last number, (p. 97,) reviewing the Rules for "American" Pomology, so called, adopted by the Massachusetts and other horticultural societies, has received the sanction of our amateur friends, and the principal cultivators in these cities. We have not only found that unusual measures were taken, by the parties who proposed the rules, to have them adopted, but that, from their utter absurdity, they are regarded as a dead letter, and will have no weight whatever with intelligent pomologists. Had not the question been made one of a personal nature, the rules would have been rejected by the Pennsylvania Horticultural Society. Members of the Massachusetts Horticultural Society, who had no knowledge of the wire-pulling in the matter, will undoubtedly call for a reconsideration of the vote.

The Season in Mississippi.—We have peach blooms on seedling trees

for over three weeks ; on foreign varieties, for about two weeks ; quince in bloom, the first I saw on the 29th Feb. ; apricots in bloom on 15th Feb. ; Chickasaw plum about the 1st. We have pears in bloom on 22d Feb. ; cabbage plants transplanted two weeks ago. *Althæa* leaves large enough to cut size of sovereign out of ; leaves on a few peach trees large enough to show at a distance of several hundred yards ; leaves on pear trees fully burst forth, (not large, though, of course,) and I can show grafts of the Swan's Orange pear that are breaking into leaf, with many others equally forward. These grafts were put in about 1st of Feb. Red wood in bloom, some black oaks in bloom, white oak buds beginning to burst forth. Thermometer on the 3d, at six o'clock, at 30° ; yesterday noon, 42° ; this noon at 40°. I had a volunteer stalk of corn with five blades on the 2d ; it is now "as dead as nits." Strawberries in bloom some time. I have near half of my corn planted, and Irish potatoes up full six inches. Though it is now cold, yet the weather must change again in a few days.—*Yours, M. W. Philips, Edwards, Miss., March 5, 1848.*

Liberal Premium for the Cultivation of the Oak.—R. S. Fay, Esq., of Lynn, has placed, at the disposal of the Essex County Agricultural Society, one hundred dollars, to be awarded for the best plantation of the oak. We are glad to see such evidence of an awakening interest in the growth of forest trees, and we trust Mr. Fay's liberal premium may be the means of directing attention to this important subject, not only throughout Essex county, but throughout the State.

Purchase of Mount Vernon by Government.—Probably many of our readers are already aware that memorials are pouring in upon Congress, petitioning for the purchase of Mount Vernon, the famous residence of Washington, and the spot where his remains are now entombed. Two years since, a number of gentlemen, embracing most of the members of the present Cabinet, and several of the senators and representatives in Congress, addressed a letter to the present proprietor of Mount Vernon, requesting him to specify the terms upon which he would relinquish the estate to the Nation. To this letter, Mr. J. A. Washington replied, that his mother, to whom it was bequeathed, would dispose of it on the following terms :—

"She authorizes me to say that, if Congress thinks proper to make the application, the government can obtain one hundred and fifty acres of Mount Vernon, lying between parallel lines, and extending from the Potomac River to the Alexandria Road, so as to include the buildings, grounds, and tomb, upon the following terms ;—

"1st. The remains of General Washington, and of every other member of the family, now in the family vault at Mount Vernon, shall never be removed from their present resting-place.

"2d. Every member of the Washington family now living, and no one else, who may desire it, may be buried there, and shall not be removed afterwards.

"3d. The Government shall never sell, rent, nor give, the whole, nor any portion of the property that may be conveyed, to any third person.

"4th. In the event of the dissolution of the existing Federal Government,

the property shall revert to the heirs of John A. Washington, the oldest son of the present proprietor.

"5th. That the sum of one hundred thousand dollars in money, or United States six per cent. stock, running not less than ten, nor more than twenty years, with interest, payable semi-annually, shall be paid to Mrs. Jane C. Washington, or to her duly authorized agent, upon the conveyance of the property to the United States."

On such liberal terms as these, it seems almost impossible that the country should not respond as with one voice. The sum of \$100,000, though seemingly large for 150 acres of land, should not be estimated, when we reflect that the spot is consecrated by the remains of one, who was "first in the hearts of his countrymen," and every true patriot should look upon it as of no moment in itself. Two monuments are already proposed to his memory,—one in New York, and the other in Washington City,—and either of which will cost far more than the sum required for the purchase of Mount Vernon. Yet, though laudable as these objects are, in all their pomp of appearance, they can never awaken those patriotic feelings which must well up in the bosom of every individual who treads the ground hallowed as the birthplace of Washington—endeared as the home of his declining years, and consecrated by the deposit of his sacred remains. We hope that our own Legislature may move in the matter, and pass a resolution approving of the noble object.—*Ed.*

ART. III. *Massachusetts Horticultural Society.*

Saturday, Feb. 26th.—Exhibited.—FLOWERS: From the President of the Society, Princess Adelaide, a new yellow tea rose, Pierre de St. Cyr, (Bourbon,) and Comtesse de Belleveau roses; also *Cypripedium insigne*, and a small slip of *Spiræa prunifolia* fl. pl. alba, with one or two flowers expanded. From Ed. Burns, gardener to S. Bigelow, handsome seedling cinerarias and pansies. From P. Barnes, cut flowers of seedling azaleas.

March 4th.—Exhibited.—FLOWERS: From W. Quant, two splendid plants, with eight or ten spikes of flowers each, of *Blétia Tankervilleæ*.

The committee made the following award:—

GRATUITY.—To Wm. Quant, for fine specimens of *Blétia Tankervilleæ*, \$3.

March 11th.—Exhibited.—FLOWERS: From Messrs. Hovey & Co., six splendid varieties of Chinese azaleas, as follows:—*Leucomegæstre*, triumphans, Smith's fulgens, Speciosissimus, New Seedling white.

Award of premiums, as follows:—

AZALEAS.—To Messrs. Hovey & Co., for the best six varieties of azaleas, \$6.

March 25th.—Exhibited.—FLOWERS: From Azell Bowditch, five very fine bouquets, composed of the rarest and most fragrant flowers, put together in very good style. Also, three varieties white tea roses, and fine specimens of the perpetual clove pink. From W. Quant, two specimens of a red

seedling azalea, of excellent properties. From William Mellor, Roxbury, two flowers of seedling camellias.

VEGETABLES : From Thomas Needham, a brace of cucumbers.

HORTICULTURAL MEMORANDA

FOR APRIL.

FRUIT DEPARTMENT.

Grape Vines will now have so far advanced as to require considerable attention. In the greenhouse, the vines will be in full bud, and, by the last of the month, in full flower. As soon as the laterals have attained a growth of two eyes beyond the fruit, they will require stopping; each lateral should also be laid in handsomely, and tied firmly to the trellis with good strong matting. Syringing should now be dispensed with, and damping of the house noon and night commenced; this will give a fine moist and genial atmosphere. Air should be given freely in fine weather, and the house closed early in the afternoon. As soon as the flowers begin to expand, the temperature should be slightly increased. In cold-houses, the vines will now begin to swell their eyes, and due quantities of air should be omitted to prevent their breaking too rapidly. Syringing should be freely given when once the eyes begin to swell. Grape vines intended for making new plantations should now be headed down, repotted, and placed in a favorable part of the house, where they will make a fine growth, and be ready for planting about the middle or last of May. Vines in the open air should now be neatly tied up to the trellis.

Raspberry plantations may be made this month with success.

Currants and Gooseberries may be planted now.

Strawberry beds should be uncovered, and the surface neatly raked, but new plantations should not be made till the last of the month.

Pear, Apple, Plum, and other fruit trees, should be planted now.

Grafting Trees may be commenced now, and continued through the month. Begin with the cherry and plum.

Pruning trees will now occupy all the leisure time when there is much of a collection of trees; all dwarf or trained trees should be very carefully looked over, and every shoot cut in to its proper length.

Pear, Plum and Apple, and other fruit tree stocks, should now be planted out, making the ground tolerably rich, and digging it to a good depth.

FLOWER DEPARTMENT.

Pelargoniums will be coming into bloom now, and will require some care to have them in the best condition. Water should be regularly given, and an abundance of air admitted. At the same time, the plants should be slightly shaded in the middle of the day, as this will keep the flowers in

perfection much longer. Fumigate immediately if any green fly appears. Young plants may now have another shift to encourage them on ; and, if the laterals are properly tied out, they will make very fine plants, fit for exhibition.

Azaleas will now begin to grow, and will require liberal quantities of water, as also a slight shade. Occasional waterings with guano will benefit them. Plants intended to make fine specimens another year should be shifted into larger pots.

Camellias will now be completing their spring growth, and will require abundant waterings. Syringe freely till the flower-buds are well set.

Fuchsias will now need attention ; all plants intended for flowering well in June should have a good shift into a rich compost, and be liberally supplied with water ; a succession may also be kept up by bringing forward young plants.

Achimenes of all the kinds will now begin to bloom, and will need four-inch pots.

Winter oxalises, done flowering, should be placed away in a frame.

Gloxinias and *Gesneras* will begin to flower, and will need larger pots.

Japan Lilies will have now so far advanced that the flowering bulbs will need to be shifted into the pots in which they are to flower. Young seedlings and small bulbs which need to be encouraged in their growth should also be repotted.

Dahlias may still be brought forward in a hotbed or the greenhouse for early flowering.

Verbenas and *petunias* should now be shifted into larger pots : cuttings may also be put in for a succession.

Rocket Larkspur seed, now sown in beds, will produce a fine bloom.

Perennial plants of all kinds may now be taken up, divided, and reset.

Pæonies may now be transplanted.

Tuberoses, *Amaryllis*, and *Gladiolus* may now be potted and brought forward.

Hydrangea japonicas should now be shifted into larger pots.

Chrysanthemums will require to be propagated either from cuttings or suckers.

Annual Flower seeds of all hardy kinds may be sown this month in the open ground, and all tender sorts in pots or boxes, in the hotbed or greenhouse.

Hyacinth and *Tulip beds* should have the surface of the soil very carefully loosened.

Cyclamens, now done flowering, may be removed to a cold frame.

Roses should be well pruned now, always cutting quite out the old wood, and, except with some few classes, heading in all new shoots very short. Manure well, and spade the ground.

Cinerarias, as soon as done blooming, should have their flower stems cut down, and the plants removed to a cold frame.

Chinese Primrose Seeds should be sown now for early flowering in autumn. The Double Purple and White may now be propagated from cuttings with success.

THE MAGAZINE OF HORTICULTURE.

MAY, 1848.

ORIGINAL COMMUNICATIONS.

ART. I. *On the Cultivation and Management of Grape Vines in Pots.* By Mr. W. WRIGHT, Gardener to the Hon. Mrs. RUSHOUT, near London. *With Remarks upon the same.* By the EDITOR.

THE cultivation of the grape we have ever deemed one of the most important branches of gardening. In our climate, the fine foreign varieties cannot be produced in any perfection in the open air, and we have therefore improved every opportunity to give all the information which would lead to their successful management under glass. The culture of this luscious fruit is yearly spreading, and, although a certain degree of skill, which can only be acquired by practice, is necessary to raise them in the greatest perfection, yet they may be grown with fair success by any cultivator of good judgment, who will bring to his aid the information which may be obtained from treatises upon the subject. It has been our object to give all this intelligence in the several volumes of our Magazine.

In our first volume, (p. 37,) we gave an article upon the cultivation of grapes in pots, from our own diary of their management, by which we had produced more than twenty clusters of beautiful Black Hamburg grapes, weighing nearly ten pounds, on one vine, not *eighteen months* from the cutting, (Vol. I. p. 30,) and, since then, in addition to the several excellent articles by our correspondents, on the growth of the vine in pots, we have transferred to our pages the experience of many of the most successful English grape-growers.

194 *Cultivation and Management of Grape Vines in Pots.*

Two years ago, at one of the exhibitions of the London Horticultural Society, Mr. Wright, author of the annexed paper, presented several pots of Black Hamburgh grapes, which, from their beauty, attracted universal admiration, and were awarded a Banksian medal; it is, therefore, with much pleasure that we have the opportunity to give the result of



Fig. 19. Black Hamburgh Grape.

Mr. Wright's experience, which we find in the *Gardeners' Journal* of a late date, and, accompanying the same, we give an engraving of one of the plants, (*fig. 19,*) as exhibited above, showing the vigor of growth, and the rich appearance of the fine clusters of fruit. The article was written in reply to a new beginner, requesting information on the culture of vines in pots:—

"In the matter of grape-growing, I am but a follower of others; and though experience, the best of all schoolmasters, may have led me to improve upon what I was first taught, I am not vain enough to think that I have accomplished more than others have achieved, or are achieving, at the present time. I have, however, produced from eight to twelve bunches of grapes, in high perfection, on one small pot, the bunches averaging three quarters of a pound each. If a "novice," by following my directions, does no more than this, I shall not have written in vain.

"Many methods have been practised and recommended by various authors, to all of whom we are much indebted, as too much cannot be said on a branch of gardening so interesting and valuable as that of growing grapes in pots, as by it no border is required, and every person who has room, and the means, may, now that glass is so cheap, build a house or pit, in either town or country, and from it have grapes of his own growth during the greater part of the year. A neat span-roofed pit, say ten or twelve feet wide, and twenty-five feet long, with the roof tolerably steep, and sufficiently high to admit of a footpath up the centre, with a bed on each side, for fermenting material, or a tank, and the whole thoroughly heated by hot water, would not be an expensive affair; and, from such a house or pit, from two to three hundred bunches of grapes might annually be calculated upon with certainty. In point of quality, grapes from pots, if properly ripened, are always better flavored than those from established vines. This fact the wasps will quickly demonstrate, if they get into the house, as they will rarely touch any other, so long as any fruit remains on the pots.

"But to the subject: in winter, when pruning the vines, I select the best ripened wood of the kinds required to take the cuttings or eyes from; and these are cut into lengths, leaving about one inch of wood below each bud, as, from that part, the strongest and best roots are always produced. When a sufficient number of eyes are prepared, they are put into seed-pans, in a mixture of leaf-mould and road-sand, in about equal quantities; if two or three years old, so much the better; and, after receiving a sufficient watering, are placed in a greenhouse, or any other place of shelter, merely protecting

them from the frost. Here they remain until January, by which time they will begin to form a callosity, preparatory to the production of roots: they are then put separately into three-inch pots, using a little loam with the leaf-mould and road-sand, and are placed in a temperature of from fifty to sixty degrees, where they remain until they produce two or three leaves, by which time the pots will be found full of roots. At this time, they are shifted into six-inch, or larger, pots, being guided by the strength of the plants, and state of their roots, adding more loam to the compost, with a portion of charred cow-dung, and charred bones. After this shift, the heat is increased to sixty or eighty degrees, placing the plants as near the glass as possible, giving abundance of air at every favorable opportunity, and keeping the atmosphere of the house as moist as possible. About the beginning of May, they are removed into ten-inch pots, still adding more loam; and, as soon as I find the roots have reached the side of the pots, I stop each plant back to within two feet of the pot. This stopping of the vine I consider a very essential point, as it strengthens them very much at the lower part, and fills up the lower buds for fruit: by adopting this practice, I have had vines fruitful to within six inches of the pots. When a leading shoot is fairly started, all lateral shoots are taken out, and, about the middle of June, the plants receive their final shift, using pots thirteen inches wide at the top, and twelve inches deep, and the same compost as before, but adding rather more of the charred bones and cow-dung. When the pots begin to fill with roots, the vigorous growth of the vines is commenced—giving abundance of air throughout the day, shutting up in the afternoon, at ninety degrees, and plying the syringe pretty freely, never allowing the foliage to become dry so long as the sun shines upon the border. By this treatment, it is astonishing how much growth the plants make during the night, and, by giving plenty of air during the day, the wood is short-jointed, hard, and well-ripened. In this manner, shoots of from fifteen to twenty feet long, and two inches round, near the pot, have frequently been produced; each plant showing from forty to fifty bunches. This year, a rod seven feet long showed thirty-three bunches, but, of course, the plant could not bring any thing like this number to per-

section: several vines, however, have, this season, perfected eleven bunches each, each bunch averaging from half a pound to one pound in weight.

"When the vines are grown to the length required for fruiting, they are stopped, leaving three or four laterals to take the sap, and prevent the plants bursting their principal buds. As soon as the wood is thoroughly ripened to the length required, the vines are removed to an airy place, so that the wood may harden; and, when the leaves assume a yellow color, they are pruned to the length required, and placed in a vinery, where they get plenty of air, but are just protected from frost. During their dormant season, the plants receive very little water, but, before taking them into heat, the pots are thoroughly examined, to ascertain the state of the roots, and also to remove some of the largest pieces of drainage, to facilitate the protrusion of roots through the bottom of the pots into the tan beneath. Water is not given for a week after introducing the plants into heat, as it is found advantageous to keep the mould tolerably dry; but, as soon as the soil becomes warm, it is well soaked with clear tepid soot-water. In this early stage of their growth, it is best to bring the plant first into healthy and vigorous growth, showing plenty of fruit and fine foliage, and then stimulating manures are of service.

"Where a house is devoted to pot-vines alone, every one is supposed to know how to commence, as to temperature, but where it happens, as in my case, that the plants are, of necessity, taken into a temperature of sixty degrees at once, it is advisable to place them at the coolest end of the house, with the pots close to the wall, against which the rods are nailed, in the form of a hoop, turning the point down to the pot; they are then covered over with a composition consisting of road-sand and cow-dung, in a plastic state, and by using the syringe, so as to keep the dressing damp, I generally succeed in breaking every bud. When fairly broken, they are set in the place where they are to perfect their fruit, and receive plenty of water, but not more than they can make use of. It is advisable to let them become tolerably dry once a week, and then they receive a thorough soaking of soot, or manure-water. As the fruit begins to color, water must be supplied with a cautious hand, but abundance of air must be

given, both night and day, if possible, and the weather is at all favorable.

"Those vines which are very heavily laden with fruit may be materially assisted by laying them over another pot filled with good compost, into which they emit roots; and, by this means, one half the crop may be supported by the original roots, and the other portion by the second pot. By this plan, of course, a large additional supply of roots is provided, and hence the berries are both better colored, and much finer, than they could be under ordinary circumstances."—(*Gard. Journ.* 1847, pp. 308, 309.)

We need not add any thing to the explicit directions of Mr. Wright. Every amateur will fully appreciate them, and, in connexion with the other articles we have alluded to in our previous volumes, he will be at no loss to produce, at least, a fair crop of grapes on vines in pots.—*Ed.*

ART II. *Descriptions and Engravings of Select Varieties of Pears.* By the EDITOR.

WE continue our descriptions of new pears, among which will be found some of great excellence, and now, for the first time, figured and fully described: these are the Duchesse d'Orleans, Ferdinand de Meester, and Beurré Crapaud,—all valuable additions to the catalogue of fine pears.

91. BEZI DE MONTIGNY. Hort. Soc. Cat. 3d Ed. 1842.

Trouvé de Montigny. Hort. Soc. Cat. 3d Ed. 1842.

Doyenné Musqué (?) of some French collections.

The Bezi de Montigny, (*fig.* 20,) though estimated as scarcely a second-rate fruit in the *Catalogue* of the London Horticultural Society, is considered, by many American cultivators, to be a pear well worthy of a place in good collections. So excellent have been some specimens exhibited before the Massachusetts Horticultural Society, that they

have been pronounced, under an unknown name, to be the Urbaniste, one of the best of our autumn pears. When well grown and fully matured, it has much of the appearance of the Urbaniste: like that pear, it is of regular form, with a smooth, yellowish-green skin, and it also possesses the same melting and refreshing juice: but, while it

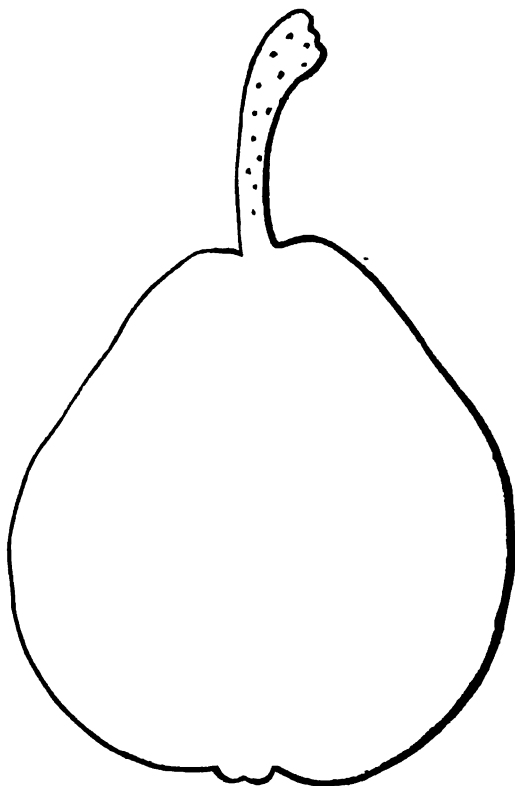


Fig. 20. Bezi de Montigny.

is wanting in the sugary character of the Urbaniste, it nearly makes up for it in its pleasant musky aroma. We consider it fully equal to the Bezi de la Motte, which we recently described, (XIII. p. 343,) and which some pomologists esteem a most desirable pear.

It is a free and vigorous grower, bearing regularly and

abundantly, and the fruit is always fair and handsome. In shape and size, it is very similar to the Urbaniste; but it may readily be detected, by one peculiarity, from almost any other pear, viz., the stem; this is always much swollen at its junction with the tree, and it is unusually smooth, and distinctly dotted with whitish specks. It succeeds well either upon the quince or pear stock. Wood, brownish olive.

Last season, we had the Doyenné Musqué in fruit, and, as we could not detect the least difference, either in the fruit, wood, or leaves, we have ventured to set it down as a synonyme.

Size, medium, about three inches long, and two and three quarters inches in diameter: *Form*, obovate, full at the crown, and obtuse at the stem: *Skin*, fair, smooth, yellowish-green, becoming paler when mature, russeted at the base of the stem, slightly tinged with red on the sunny side, and covered with russet specks: *Stem*, long, about one and a half inches, curved, very thick, and much swollen at the end adjoining the branch, dull brown, usually spotted with grayish white, and inserted in a shallow cavity: *Eye*, small, and little depressed: *Flesh*, white, fine, melting, and juicy: *Flavor*, sugary and sprightly, with a pleasant musky aroma: *Core*, large: *Seeds*, large, brown. Ripe in October.

92. GANSEL'S BERGAMOT. Hort. Soc. Cat. 3d Ed. 1842.

Broca's Bergamot,	}	according to Hort. Soc. Cat. 3d Ed. 1842.
Ive's Bergamot,		
Staunton,		
Gurle's Beurré,		
Bonne Rouge,		
Diamant,		

Gansel's Bergamot, (*fig. 21.*) though raised nearly a century ago, is still one of our most delicious autumn pears. It cannot, perhaps, be considered quite as well adapted to all localities as some other varieties, but, where the situation is favorable, it is a most productive and excellent fruit. Like many of the older pears, its merits have been overlooked, in the eagerness to possess new and recently introduced kinds.

The Gansel's Bergamot is a pear of English origin; and

was obtained from the seed of the Autumn Bergamot, by Lieut.-General Gansel, at his seat at Donneland Hall, near Colchester, in 1768. By English cultivators, it is justly esteemed a first-rate pear. The growth of the tree is somewhat spreading, and the leaves have a glaucous or mealy appearance, which at once distinguishes it from other varieties. It succeeds either on the quince or pear stock. Wood dark gray.

Size, large, about three inches long, and three and a half in diameter : *Form*, regular, roundish, considerably flattened at each end, and narrowing little towards the stem : *Skin*,

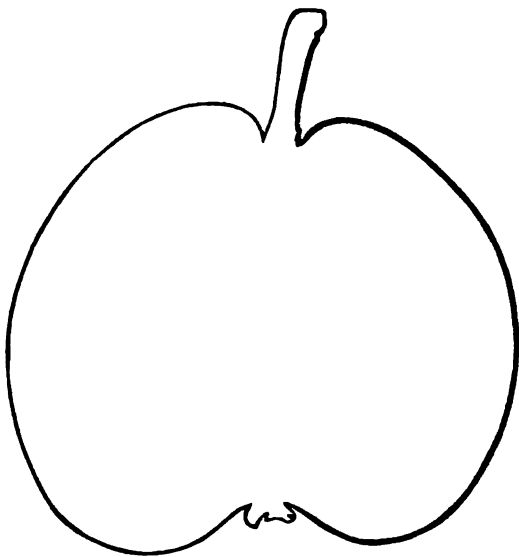


Fig. 21. Gansel's Bergamot.

fair, smooth, yellowish brown, little russeted on the sunny side, and regularly covered with green and russety specks : *Stem*, short, about half an inch in length, moderately stout, straight, and deeply inserted in a small round cavity : *Eye*, medium size, open, and sunk in a large, round, smooth, and rather deep basin ; segments of the calyx short and narrow : *Flesh*, yellowish-white, coarse, melting, and very juicy : *Flavor*, rich, sugary, and delicious, with a high perfume : *Core*, large : *Seeds*, small, roundish, pale brown. Ripe in October.

93. BEURRE' D'ANJOU. *New American Orchardist.*

Mr. Kenrick first introduced this excellent pear to the notice of American cultivators: it was one of several new kinds which he obtained in Europe, and which were described, for the first time, in his excellent work. The London Horticultural Society's *Catalogue* places the Beurré d'Anjou as synonymous with the Brown Beurré: either the true variety could never have existed in the Society's collection, or a great error

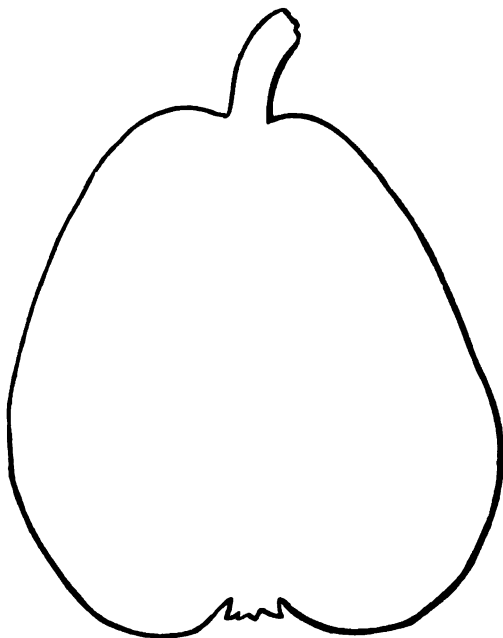


Fig. 22. *Beurré d'Anjou.*

must have been committed; for the two pears are too distinct in their character to have been considered identical. This only shows that, even with all the facilities afforded by the Society's collection, errors have occurred, and, in making the *Catalogue* our authority in nomenclature, it does not follow that positive errors should be continued.

The d'Anjou (*fig. 22,*) is a fruit of much excellence. It comes in at a good season, among the late fall pears, and is in eating for

a long time. It is also of fine size, the tree vigorous and healthy, and a most abundant bearer. Young trees, only four years planted, are completely covered with fruit buds: it succeeds either upon the quince or pear stock. Wood, pale, dull yellow. It can be recommended as well worthy a place in every collection of pears.

Size, large, about three inches long, and two and three quarters in diameter: *Form*, oblong-obovate, full at the crown, tapering to an obtuse point at the stem: *Skin*, fair, smooth, yellowish, very broadly marked on the sunny side with dull red, much russeted around the eye, and regularly covered with minute russet specks: *Stem*, short, about half an inch long, thick, curved, and obliquely inserted in a shallow cavity, formed by uneven swellings and projections of the fruit: *Eye*, medium size, open, depressed in a round, regularly formed basin; segments of the calyx connected, reflexed, thick: *Flesh*, yellowish-white, coarse, melting, and juicy: *Flavor*, rich, vinous, and sprightly, with a fine aroma: *Core*, small: *Seeds*, long, large, and pointed. Ripe in October and November.

94. DUCHESSE D'ORLEANS. *New American Orchardist.*

The first account we have of this fine pear is that by Mr. Kenrick, in the *American Orchardist*, (7th edition, 1844.) His authority for the name is M. Oudin, a nurseryman at Lisieux in France, from whom, we believe, he purchased trees. Mr. Kenrick's description is brief: nothing more is said of its origin than that it had been "lately received from Normandy." Mr. Kenrick, with his usual liberality, gave scions to the late Mr. Manning, in whose collection it first fruited, in 1844 or 1845, and the younger Mr. Manning has fully confirmed Mr. Kenrick's favorable notice of it, in a short description of the fruit, from specimens produced in his garden, in our volume for 1846, (XII. p. 147.) Since then, we have had several opportunities of tasting the fruit from Mr. Manning's collection, and we fully agree in all the encomiums which have been bestowed upon it.

The Duchesse d'Orleans, (*fig. 23*), is a very handsome pear, having a fine yellow skin, mottled with golden russet. The

tree is vigorous and hardy, and has somewhat of an irregular spreading habit, though, when young, the branches grow upright. It is also a good bearer. Wood, greenish-yellow, with prominent buds.

Size, large, about three and a half inches long, and two and a half in diameter: *Form*, regular, pyramidal, full at

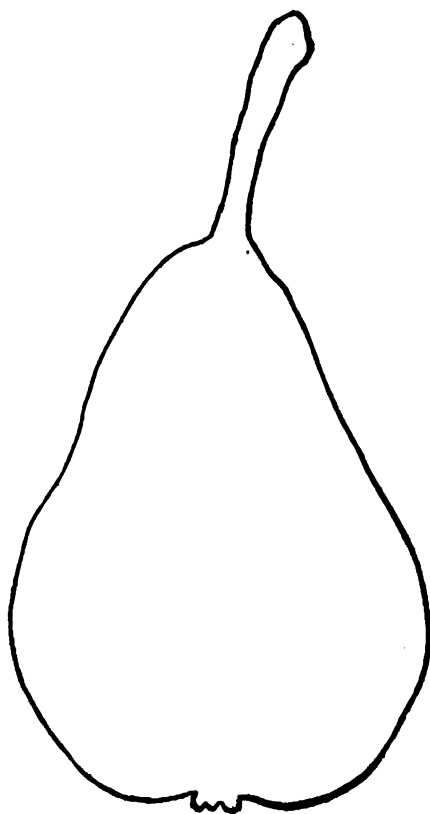


Fig. 23. Duchesse d'Orleans.

the crown, little contracted in the middle, and tapering to the stem: *Skin*, slightly rough, light yellow, mottled with golden russet in the shade, thinly marked with red in the sun, and sparsely covered with small russet specks: *Stem*, long, about one and a quarter inches in length, rather stout, swollen at the end adjoining the tree, straight, and obliquely inserted in

a fleshy base without any cavity: *Eye*, medium size, open, and scarcely depressed; segments of the calyx short, projecting: *Flesh*, yellowish, fine, buttery, melting, and juicy: *Flavor*, rich, sugary, and delicious, with a pleasant musky aroma: *Core*, medium size: *Seeds*, medium size, rather long, dark brown. Ripe in October.

95. BEURRE' CRAPAUD. *Hort. Soc. Cat.* 3d Ed. 1832.

Some eight or ten years since, the late Hon. John Lowell exhibited some specimens of pears under this name, but it does not seem to have been introduced to but few collections. The *Catalogue* of the London Horticultural Society correctly describes it as a first-rate pear, "of the nature of the White

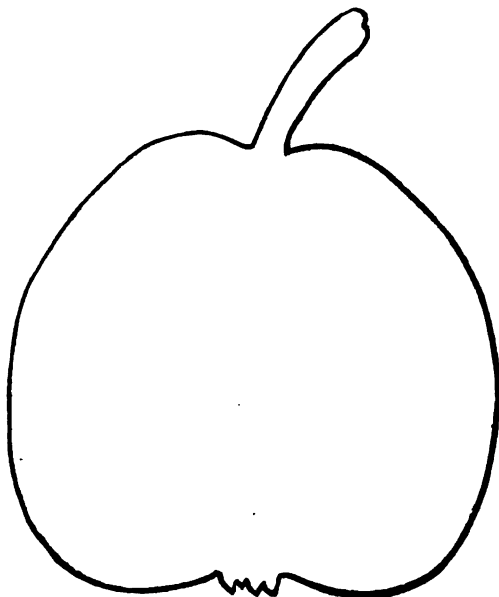


Fig. 23. *Beurre Crapaud.*

Doyenné," and it so much resembles that old and favorite sort, that some cultivators have thought it must be synonymous with it. It is, however, distinct. In form and color, it bears a great resemblance; but it possesses a more musky flavor,

and is generally a higher-colored pear than the White Doyenné.

In 1842, we received scions of the Beurré Crapaud, (*fig.* 23,) from Henry Corse, Esq., Montreal; and, in the letter accompanying the same, he states that, even in that climate, it was very hardy, and altogether a most superior fruit. Such good authority for its adaptation to our climate, as well as its excellence, in connexion with our own knowledge of it, is sufficient to induce us to recommend it as a most desirable variety. It grows upon the pear or quince, and the wood, which is exceedingly vigorous, is light yellow.

Size, medium, about two and a half inches broad, and two and a half long: *Form*, roundish-obovate, full, and little flattened at the crown, rounding off to the stem end, which is obtuse: *Skin*, fair, smooth, deep yellow, beautifully shaded with bright red in the sun, and covered with small, russet specks: *Stem*, short, about half an inch long, stout, curved, largest at the end adjoining the branch, and inserted, generally obliquely, in a shallow, open cavity: *Eye*, medium size, partially closed, and little depressed in a broad basin; segments of the calyx short, stout, stiff, projecting: *Flesh*, yellowish, fine, melting and juicy: *Flavor*, rich, sugary, and delicious, with a fine musky aroma: *Core*, large: *Seeds*, medium size, and brown. Ripe in October.

96. ROUSSELET DE MEESTER. *Mag. of Hort.* Vol. VIII. p. 58.

Ferdinand de Meester! Noisette, in the *Annales de la Soc. d'Horticulture*, Vol. XV.

Whether the Rousselet de Meester, or the Ferdinand de Meester, be the correct name for this pear, we are unable to say. Mr. Manning described it in our Magazine, (Vol. VIII. p. 58,) and his specimens were produced on trees the scions of which were among the first lot received by Messrs Manning and Kenrick, from Dr. Van Mons, in 1835; Noisette, however, describes a pear as the Ferdinand de Meester, which Van Mons named after his gardener, and it is scarcely possible that two distinct varieties would be named with so slight a difference. As Van Mons, in making up his list, would undoubtedly send the true names, we infer that, although he

did dedicate it to his gardener, he only gave part of his name, and that the addition of Ferdinand was a mistake of Noisette's. Our specimens were produced on a tree received as the Ferdinand de Meester, and, as it is identical with Mr. Manning's Rousselet de Meester, in the absence of more accurate information, we adhere to his authority.

The Rousselet de Meester, (*fig. 24*.) is a fine pear, possessing a very sugary and melting flesh, and a rich, perfumed

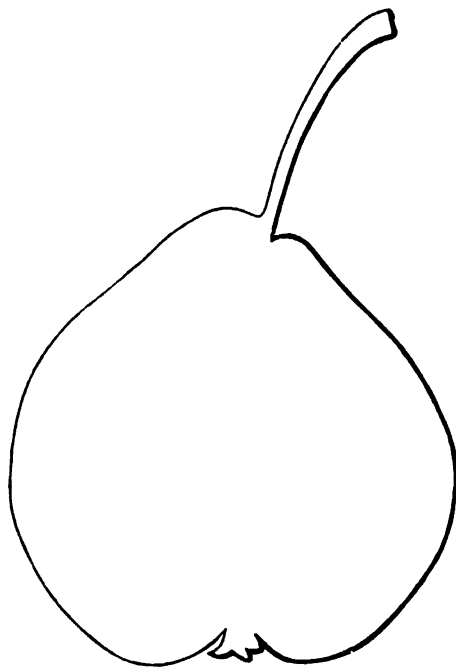


Fig. 24. Rousselet de Meester.

flavor. The tree is a vigorous grower, making strong stocky wood, of a grayish olive color, and it succeeds well either upon the quince or pear. From the product of one small tree, we should judge that it would prove a great bearer.

Size, medium, about two and a half inches long, and two and a half broad: *Form*, obovate, regular, little contracted below the middle, and obtuse at the stem: *Skin*, smooth, greenish-yellow, and thinly covered with green and russet

specks : *Stem*, long, about one and a half inches, rather slender, curved, and obliquely inserted in a small, shallow cavity : *Eye*, medium size, open, and sunk in a very shallow basin ; segments of the calyx very short, rounded : *Flesh*, yellowish, little coarse, melting, and very juicy : *Flavor*, rich, sugary, very highly perfumed, and delicious : *Core*, rather large : *Seeds*, large, pale brown. Ripe in October.

ART. III. *Pomological Notices ; or, Notices respecting New and Superior Fruits, worthy of General Cultivation.* By the EDITOR.

PEARS.

AT page 108, we gave a brief account of several new pears, which had fruited in our collection the past year, and also of several which we found noticed in the *Bon Jardinier* for 1848. Since then, we have received a supplementary *Catalogue of Fruits* in the collection of Mr. Rivers, of Sawbridgeworth, and, as it contains considerable information in regard to some of the varieties already noticed, as well as others which have a high reputation, we embody it in our notices here. Mr. Rivers generally makes an annual tour on the Continent, for the purpose of collecting new fruits and plants, and his remarks are the results of his observations during his visit the last autumn. Considerable interest has been felt, among pomologists, in regard to the new Belgian pears said to have been produced by M. Esperen, and, according to Mr. Rivers, cultivators will not probably be disappointed in the quality of most of his seedlings.

"In a recent tour in Belgium," says Mr. Rivers, "I was enabled, by a special introduction, to see the garden of (I lament to say the late) Major Esperen. This gentleman devoted many years of his life to the raising of new fruits from seed, more particularly pears. He succeeded in giving to the gardening world some very valuable late pears. Most of these are enumerated in my *Catalogue* ; but I am now enabled to recommend them with the greatest confidence, hav-

ing seen the parent trees in full bearing this present autumn. The first in my note-book is—

Belle apres Noel, or *Belle de Noel* (Esperen.)—This is a full-sized pear, about the size of the Brown Beurré; melting and high-flavored; ripening, according to circumstances of soil and season, from December to the end of January; tree very hardy, and a good bearer.

Bergamotte d'Esperen.—A pear of medium size, inclining to the shape of the Bergamot pear; melting, high-flavored, and in perfection from March to the end of April; tree robust, hardy, and a good bearer.

Beurré Bretonneau (Esperen.)—A new sort, not in my Catalogue; fruit, oval, full-sized, melting, and high-flavored; color green, spotted with brown; in perfection from January to March; tree, robust, hardy, and a great bearer.

Bezi d'Esperen.—Fruit, full-sized, slightly turbinate, melting, and of good flavor; in season from December to the end of January; tree of not very vigorous growth, but a good bearer.

Elise d'Heyst (Esperen.)—Fruit, of medium size, melting, and high-flavored; in season from March to the end of April, and even till the middle of May, if kept in a cool fruit room. This pear requires a warm and generous soil; in cold soils, it is often not first-rate.

Fondante de Malines (Esperen.)—Fruit of medium size, melting, and good; season, from January to February; tree very fertile and vigorous.

Josephine de Malines (Esperen.)—This is, I believe, a seedling from the *Passe Colmar*, which it much resembles in habit; fruit rather smaller than those of *Passe Colmar*; green or greenish-yellow when ripe, melting, and excellent; season, from March to May. Like all very late pears, this requires a warm and rather light soil when on the pear stock; it seems to do well on the quince, and will doubtless ripen in cold soils, and situations unfavorable to it on the pear stock. The parent tree of this variety, when I saw it, formed a beautiful pyramid, 12 feet high, and covered with fruit.

Napoleon d'Hiver (Esperen.)—Fruit large, turbinate, melting; season, January to February; tree very robust, hardy, and a great bearer. The parent tree of this variety, appa-

rently some ten or twelve years old, was loaded with fine fruit.

Soldat d'Esperen, or *Soldat Laboureur* (Esperen.)—Fruit, large and turbinate, only half-melting, but high-flavored and excellent; season, from January to February; tree very robust, and a great bearer. I was much delighted with the beauty of the parent tree of this variety; it formed a handsome pyramid, on which its large fruit hung at regular distances, almost as if placed there by the hand of the cultivator.

Suzette de Bavay (Esperen.)—Fruit of medium size, knobby and irregular in shape, something like the *Ne plus Meuris*; flesh melting, high-flavored, and excellent; season, from March to May; a pear of the highest excellence; tree very vigorous and very fertile. This variety, in particular, deserves a place in every collection.

Triomphe de Jodoigne.—This pear was raised a short time since by M. Bouvier, (since deceased,) a great pear amateur at Jodoigne, in Belgium; it is one of the very largest of our melting pears, as large, or even larger, than the *Beurré Diel*: flesh, melting and excellent, without the musky flavor peculiar to that variety; season, December; tree astonishingly vigorous and robust.

Beurré gris d'Hiver nouveau.—In shape, much like the *Easter Beurré*, and equal to it in size. This is a most abundant bearer, as a pyramid on the quince, flesh melting and high-flavored, and ripens from the end of December to the end of January, or later.

Crassane d'Hiver (Brunont or Bruneau.)—This is far superior to the *Winter Crassane* of the late Mr. Knight, both in size and flavor, being a melting pear of first-rate quality; it bears freely as a pyramid on the quince, ripening in January and February, and, in some seasons, will keep till March."

CHERRIES.

Many new varieties of cherries have recently been introduced into foreign catalogues, and a few of them are thus noticed by Mr. Rivers.

"Bigarreau de Hildersheim.—I ate the fruit of this variety, preserved under muslin, September 10; its flesh was firm,

good and sweet, and would have (as I have written in my note-book,) remained good till the end of the month.

Cerise Indulle, or *Early May*, is a small, subacid cherry, agreeable and valuable for its extreme earliness, as it ripens, in some seasons, towards the end of May; it succeeds admirably on the Mahaleb stock, and is very valuable for forcing in pots, forming a small, compact bush.

Louis Philippe.—A cherry much like the Kentish, but sweet and very refreshing. A great bearer, and forms a pretty, fertile bush.

Reine Hortense, *Monstreuse de Bavay*, *Belle de Bavay*, 16 à la Livre, *Belle de Petit Brie*—for, like most valuable varieties of fruits, it has numerous synonyms—is a first-rate variety; very large, and apparently a hybrid between the May Duke and Kentish; flesh soft, very juicy, sweet, and refreshing; ripening about a fortnight after the May Duke, and may be kept on the tree under a muslin cover till late in August.

Tardive de Mons, or *Merveille de Septembre*, is one of the latest cherries known; fruit, rather small, flesh very firm, rather dry, and very sweet. I gathered the fruit from my specimen tree the 20th of this present month (October;) they were perfectly sound."

To these we add the following account of a cherry which is said to be a new variety, but which, from the description, appears to us to be the Elton.

Great Bigarreau de Mezel.—A new cherry has recently been brought to notice in France, and a full account of it is given in the *Revue Horticole*. If it is really a new variety, of which there is some doubt, it will prove a valuable acquisition. As the variety has already been introduced into our collections, we copy the following description:—

"This beautiful cherry was discovered at Mezel, a village of Limagne, near Clermont Ferrand. A full history and description of it were given to the Horticultural Society of Auvergne, by M. Lecoq, the new President of the Society. According to his report, the first information in regard to this cherry was communicated by M. Ligier de la Prude, who stated to the Society that he found the tree growing upon his estate at Mezel. Wishing to be better assured respecting the qualities and origin of the fruit, the Society appointed a del-

agation, consisting of Messrs. Cartier, Bravy, and Martial de Champflour, to proceed to the premises, and examine the merits of this variety. On the 18th of June, the fruit was at maturity, and, taking a lady of the Society, for the purpose of making a faithful drawing, the committee proceeded to Mezel, to accomplish the object for which they were appointed. The fruit was abundant, and in various stages of maturity, as is usual with the Bigarreaus. The tree was tall, at least thirty years old, and grafted low on the stock. The cherries were most abundant, and some of the branches were bending beneath their weight, in a graceful manner. The weight of the fruit is remarkable. Some of the cherries weighed ten *grammes* ($6\frac{1}{2}$ dwts.) each, and, on an average, eleven of them, weighed accurately, completed a *hectogramme*, (nearly a fifth of a lb.,) which gives one hundred and eighteen cherries for a *kilogramme*, 2lb. $3\frac{1}{2}$ oz. *avoirdupois*,) an enormous weight when compared with that of other kinds of cherries. One of the cherries measured nearly four inches in circumference, and a little more in height.

The form is oval, slightly flattened on the sides, a little obtuse at the base, slightly irregular on the surface, concave at the part where the stalk is inserted, which is slender and of middling length. The skin is a fine vermilion red, mingled with carmine, glossy, and brilliantly polished on the surface. The flesh is rose-colored, firm, though melting, sweet, and very good. The stone is small.

The tree is very vigorous. Leaves taken from young trees measured $7\frac{3}{4}$ inches in length, and nearly 4 in width, giving the tree a foreign aspect. Several trees of this kind are growing at Mezel, and all are grafted; but the committee think the variety 'entirely new,' and pronounce it the most beautiful and the best Bigarreau ever seen. It appears not to be known elsewhere, and is supposed to have originated at Mezel."

We have but little doubt that this will prove some well-known cherry: the size is not remarkable, as the figure accompanying the above description does not measure more than that of the Elton. Neither is the weight to the lb. more than that of some of our second-size cherries, 57 of the May Duke having weighed 1 lb: the Black Tartarian would be much heavier.

Coe's Transparent.—We gave a short notice of this American seedling in our last volume, (XIII. p. 423), and there

stated that we did not think it would prove better than Sparhawk's Honey. Since then, we have had the pleasure of receiving the *certificate* of Mr. Coe, which accompanied a couple of trees we purchased of him for our specimen collection, with a view to compare its qualities with other kinds. But, that pomologists may have the originator's account of it, we copy the certificate here :—

"The tree is very thrifty, has a beautiful form, and bears abundantly every year. It sprang from seed planted by himself, and never was grafted or inoculated. Its fruit, therefore, he *knows* to be entirely original, and hitherto unknown.

"When ripe, it is large, fair, free from defect or aptness to rot, and never stains. Its flavor is sweet, sprightly, and delicious, and its color a beautiful light red; and, though its pulp is very rich, delicate, and melting, the fruit keeps fresh for several days after picking, and endures transportation without injury. It is believed, also, to be the *earliest cherry* of this climate, (generally ripening early in June,) and, unlike other kinds, usually furnishes fruit in perfection from three to five weeks.

"Its excellent qualities are well known in this vicinity, as well as in Hartford, New Haven, and other places where specimens have been exhibited. It also sustains a high reputation among fruit-dealers generally, at a distance; and, when fairly tested, is pronounced, by competent judges, to be far superior to any other cherry. No person but the subscriber ever possessed this stock, until March 16, 1846, as, prior to that date, he had invariably refused to sell or part with it. To guard against impositions, therefore, every sale made by him will be accompanied by a certificate under his signature."

PLUMS.

Among the new plums, Mr. Rivers names a few which are fine. It will be seen that he highly prizes the Reine Claude de Bavay, but, from his statement, it would appear that three varieties have been described for it.

De Montfort.—This is much like Royale Hative, but larger; ripe middle of August; exceedingly rich and good.

Imperiale de Milan.—Fruit large, oval, and of a deep purple; ripe October 12th; juicy, sugary, and excellent.

Mamelonne.—This is a plum raised by M. Sageret, a gardener, near Paris; it is almost grotesque in its shape; instead of being depressed at the stalk, as most round plums are, it has a small, nipple-like protuberance, and some of its fruit are irregularly knobbed; it is of the green gage family, and much like it in flavor, parting freely from the stone, and ripening ten or twelve days before it; color green, densely spotted with red.

Reine Claude de Bavay.—"I saw the parent tree, a standard of this very fine plum, in the garden of the late Major Esperen, at Malines, towards the end of last August. It is apparently about fifteen years old; it was covered with fine fruit; they were, indeed, more numerous than the leaves. I ate of fruit produced here on a dwarf standard, preserved under muslin, October 12th, perfectly fresh and unshrivelled; shape, roundish oval; color, greenish yellow, spotted with red; flesh, rather firmer than that of Jefferson, but juicy, sugary, rich, and excellent; size, between the green gage and Washington; indeed, it much resembles the latter in shape; it has roundish shining leaves, and smooth shoots, very much resembling the Washington, only that the former are smaller, and the latter more slender, and is doubtless a hybrid between that and the green gage. To this plum hangs a not very agreeable tale. In 1843, I received it from France, and, in the autumn of 1845, having a report, from a friend on the Continent, of its great excellence, I advertised plants of it for sale. Not having enough, I bought 100 from a most honorable nurseryman in France. When they arrived, I felt some doubts, owing to their having prominent, pointed buds. Before I sold any, I wrote to him expressing my doubts. In reply, I received an invoice from a nurseryman at Ghent, dated 1843, in which some plants were charged to him, at a high price, as *Reine Claude de Bavay*. As this person at Ghent had stated that he alone had received this plum from Major Esperen, my scruples were quieted; but, when some plants I had left unsold came into leaf, in the spring of 1846, I found they were *Coe's Golden Drop*. In the autumn of 1846, feeling very anxious that my friends should have the true sort, and then, beginning to

doubt even those I had first received from France, I wrote to Mr. Van Houtte, of Ghent, for 100 of the true sort, to replace those which I had sent out incorrect in 1845. I sent these to my friends with the fullest conviction they were correct, as Mr. Van Houtte assured me they were; and, as Malines is so short a distance from Ghent, I concluded that they *must be*. My chagrin may, therefore, be imagined when these plants, and grafts from them, came into leaf, in the spring of 1847, to find them to all appearance nothing but our old green gage, differing, in leaves and shoots, from those I received first from France, (the true sort,) which, as I have before stated, much resembles the Washington in habit. Mr. Low, of Clapton, also advertised plants of Reine Claude de Bavay in the autumn of 1845 or spring of 1846. I bought some plants to ascertain if they were correct, *i. e.*, if they resembled in habit what I considered to be the true sort, with broad shining leaves. These proved to be the Green Gage; consequently, I am led to assume that all those sold by Mr. Low were the same. There are, therefore, in France, Belgium, and England, three varieties of plums bearing the name of Reine Claude de Bavay, viz., the Green Gage, Coe's Golden Drop, and the true sort. The uncertainty respecting this plum gave me great annoyance last summer, and I determined upon a journey to Malines, to see the parent tree when in fruit. When I arrived at Malines, I found Major Esperen recently deceased, and I much feared that my attempt to get a view of the tree would be fruitless. I obtained, however, through the kindness of Mr. Van Houtte, an introduction to Madame Esperen, who seemed to take pleasure in pointing out to me the numerous proofs of the horticultural skill of her departed husband. I may here mention, merely to show how superiorly the Belgians and French manage their fruit trees in the open quarters, (I cannot give them equal credit for wall trees,) that two small gardens here, not more than one rood each, contained some hundreds of pyramidal pears, plums, and apples, nearly all perfect specimens, and covered with fruit."

The October Green Gage, Reine Claude d'Octobre, is, so much like Reine Claude Tardive as not to be worth keeping distinct; this is a rather small round plum, exactly like the Green Gage in color and shape, flesh melting and rich, with

the Green Gage flavor, but not quite so juicy; color green, spotted with red; flesh parts freely from the stone. I ate my fruit October 22d, and found them excellent; it is perfectly hardy, and its fruit may be preserved on the tree, if the season is not very wet, till November.

Rivers's Early, No. 1.—I mention this plum only because it has invariably proved excellent, and on account of my having given it a name; it will, in future, be called "Rivers's Early Favorite;" its shoots are downy; it ripens a trifle earlier than the following, and in flavor is, I think, a little superior.

Rivers's Early, No. 2.—This is the hardiest and most prolific of all our early plums; in fact, it *always* bears a crop; I purpose to call it "Rivers's Early Prolific." In Covent Garden market, in July last, the fruit sold readily at 7s. per sieve, containing about half a bushel. The shoots of this are smooth, although it was raised, like the preceding, from *Precoce de Tours*, which has downy shoots; it may be called the Market Gardener's Plum, *par excellence*, on account of its great productiveness.

GRAPES.

Since our account of several varieties last year, (Vol. XIII. p. 114,) a few new ones have been introduced to the notice of cultivators: of the qualities of some of these we have but little information; of the others, we add the following:—

Black Prince Hamburgh.—A new seedling, raised by Mr. John Williams, of Pitmaston, who gives the following account of it in the *Journal* of the Hort. Soc. (Vol. III. p. 44.) The variety was a cross obtained by impregnating the Black Hamburgh with the pollen of the Black Prince, which I consider, after more than forty years' experience, to be one of the best grapes we have—not of the perfumed kind. The only defect I find in the Black Prince is, that the berries grow too much crowded, and require so much thinning. I therefore wedded it to the Hamburgh, with a view of obtaining a more loose open bunch, with the vinous acidity and richness of the Black Prince. This double object, I think, I have obtained. It ripens earlier than the Hamburgh, and colors with less heat and light. The plant from which I gathered the bunch

you will receive was planted at the end of a lean-to-roofed house, and only got a little morning sun, and that but for a short period, owing to the shade of a large willow tree. You, therefore, cannot judge what the flavor will be under these disadvantages. I expect the bunch and berry will be double their present size, when trained under the roof glass, and the wood becomes strong.

Mr. Thompson, to whom the grapes were sent, describes it as follows:—The bunch weighed 1 lb. 3 oz. It was loosely formed, with long shoulders, and long, slender pedicels. The berries are oval, being about nine tenths of an inch in diameter from the insertion of the stalk to the opposite end; and eight tenths in the transverse direction. The color is blue-black; in this respect resembling the Black Prince more than its female parent. The juice is more purple than that of the Hamburgh, and is sugary and rich. Seeds, two or three in each berry. The variety deserves to be propagated.

Muscat Escholata.—Some years ago, Mr. Money, a cultivator near London, raised several seedling grapes, which he disseminated considerably among amateurs, but, after a while, they were pronounced by some to be no different from other sorts; or, if seedlings, so much like the parents as not to be worth keeping distinct. The last autumn, some fine specimens of the *Muscat Escholata*, one of the varieties, were exhibited before the London Horticultural Society, and attracted much attention: a certificate of merit was awarded for their excellence. The particular characteristics of this variety are its size, and the length of time it hangs without shanking or shrivelling,—valuable properties in any grape. Mr. Ward, the exhibitor, stated, that he had had berries in December, which measured more than four inches in circumference. It is a white grape, similar to the *Muscat of Alexandria*, and well worthy of introduction.

RASPBERRIES.

Large Fruited Monthly.—Under this name, Mr. Rivers has introduced a new variety from the Continent, and, accompanying specimens sent to the Horticultural Society for exhibition, 2d November last, he sent the following account of

it:—"I think it one of the most valuable introductions we have lately been favored with in this class of fruits. It is, I believe, of continental origin, and may be called the large-fruited monthly raspberry: it continues to bear from the end of August all through September, October, and, if the frost is not severe, (it does not mind a slight frost,) till the end of November. The late heavy rains have injured its flavor slightly; before they visited us, it was quite equal in flavor, as it is in size, to raspberries in July. To ensure a very abundant crop in autumn, all the canes should be cut down close to the ground in spring; but a good autumnal crop may be obtained, as well as a crop in summer, by leaving one cane, cut in the usual manner, to each root, cutting the others down closely for the autumnal crop. My plants are now covered with fruit in all its stages, and many lateral shoots are just coming into bloom, so that, if grown in large pots, and placed under glass, raspberries may be gathered in December. It bears its autumnal crop from lateral shoots, which each rod puts forth from every joint, forming a beautiful pyramidal bush. In this respect, as well as in the superior size and flavor of its fruit, it differs from the old variety known as the double-bearing raspberry. At this moment, my plants are borne down with the weight of fruit upon them.

STRAWBERRIES.

Notwithstanding the production of many varieties of strawberries by English cultivators, the Keen's Seedling and the British Queen yet maintain their supremacy, and probably the most extensively cultivated strawberry in Britain is the former variety. Mr. Myatt, the originator of the latter, has raised several seedlings within a few years, which have been named and disseminated, but they have no great merit to recommend them. Like many seedlings, they are no better, if scarcely as good, as the parents, and, after a few years, they will go out of cultivation altogether. This has been the case with numerous highly prized seedlings raised here; over-rated at first, they always disappoint the expectations of cultivators.

If we can place any belief in the advertisement, a most re-

markable strawberry has recently been produced in Scotland. The *Aberdeen Beehive* is the name of this variety, the "finest ever produced." Had the raiser been content to make any reasonable statement, there would be some hope that a very valuable acquisition had been made to the varieties of this delicious fruit: but when it is asserted that *one* plant will produce equal to *twenty* of any other sort, all who know any thing of our fine kinds will at once draw their own inferences in regard to the productiveness of the Beehive. Some of our choice varieties produce 50 berries on one plant: will any body believe one plant will produce *one thousand*? We already have this variety in bearing, in pots, and see nothing, so far, of its superiority over other kinds: it is not large, and its whole merit, if it have any, must consist in its productiveness. The following is the description given by Mr. Mathewson, of Aberdeen, the originator of the strawberry:—

Aberdeen Beehive.—The greatest bearer ever known: one plant will produce a number equal to twenty of any other sort. Each plant throws from fifty to one hundred and twenty clusters, forming a top resembling a beehive, and so regularly do they ripen, that they may be gathered in bunches of from twelve to thirty berries. The unprecedented number of three hundred thirty-four have been taken from a single plant at one time. It answers admirably in forcing, twelve pots having carried, this season, five thousand six hundred berries. The extraordinary quality and appearance of the fruit is more than can be described or comprehended, but by those who have actually seen them on the ground or table, where they have excited curiosity and admiration. The berries are about one size, and measure three and a half inches in circumference; their shape is round, of a bright scarlet color, garnished with a beautiful green husk, folded towards the stalk; high flavor and delightful aroma; makes an excellent preserve, the interior being the same in color as the exterior. Directions for cultivation are sent by the originator.

Eleanor, (Myatt's.)—This superb variety produces large, handsome fruit, is very prolific, of a good robust habit, fine flavor, and ripens the late fruit off to a good size. This is Mr. Myatt's description of this new seedling.

La Liegeoise is the name of a new French strawberry which is said to be large and fine.

ART. IV. *Descriptions of Eight New Verbenas.* By the
EDITOR.

In our last number, (p. 170,) we briefly noticed several new and fine varieties of the verbenas, and we now add a full description of each. Seedlings are easily produced, and thousands are raised every year, but, out of the great number, very few are sufficiently distinct to deserve a name, or a record in our pages. The following, however, are particularly new, distinct, and splendid, and they show how much more, in novelty and variety, is to be attained by continued exertions in the growth of seedlings. It was a long time before the dahlia broke into the fancy colors now so much admired, and other flowers have been cultivated for years without any remarkable variation. So it has been with the verbenas; but now, that the plain selfs are giving way to bicolored tints, ere long, we may look for spotted and striped varieties of great beauty.

Eximia.—Flowers, light brilliant scarlet, with a distinct yellow centre: petals large, nearly flat, with good edge: umbels, very large, long, compact, and well formed: habit, vigorous: foliage, good. Decidedly the best scarlet yet produced.

Exquisite, (Barnes's.)—Flowers, medium size, of a dark, dull red, inclining to scarlet, with a distinct, straw-colored centre: petals, medium size, of good substance, cupped, and well formed: umbels, medium size, compact, and of good shape: habit, moderately vigorous: foliage, good. If the color of this variety was deeper and richer, it would be unexcelled as a two-colored flower.

Susanna, (Weld's.)—Flowers, medium size, of a fine deep rose, with a distinct scarlet centre: petals medium size, slightly starry, little reflexed: umbels, compact, and well formed: habit, rather slender: foliage, narrow. This is a very fine verbenas. The habit of the plant is not quite so good as the average of seedlings, but it is a profuse flowerer, and is a brilliant and distinct sort.

Odorata, (Nugent's.)—Flowers, medium size, of a pale blush of pink, with a distinct rose centre: petals, medium size, cupped: umbels, medium size, rather compact, and of good

form: habit, moderately vigorous: foliage, thick and good. This is a fragrant and very delicate variety.

Grandissima.—Flowers, large, of a rich, deep, brilliant crimson: petals, cupped, and of good substance: umbels, compact, well formed: habit, vigorous: foliage, good. This is the best really *crimson* verberna we have ever seen: it is just the color of Bouquet of Flora rose.

Brunette.—Flowers, medium size, of a rich dark scarlet, with a distinct maroon centre: petals, slightly starry and reflexed: umbels, medium size, well formed: habit, rather slender: foliage, small and good. A new and very distinct verberna.

Favorite.—Flowers, large, pale blush, with a fine pink centre: petals, large, partially cupped, and well formed: umbels, large, and moderately compact: habit, vigorous: foliage, large and good. This is a handsome verberna, a strong grower, and perhaps too strong for growing with others of a more procumbent habit.

Sylph.—Flowers, medium size, of a delicate flesh color, or blush white, tinted with pale rose: petals, good size, of fine substance, well formed, and little reflexed: umbels, medium size, rather compact, and well formed: habit, vigorous, erect, with a neat and pretty foliage. A peculiarly exquisite variety, from the delicate tintings of rose on its waxy petals.

These eight varieties, added to those already described in our Magazine, make the whole number upwards of *sixty*.

ART. V. *Floricultural and Botanical Notices of New and Beautiful Plants figured in Foreign Periodicals; with Descriptions of those recently introduced to, or originated in, American Gardens.*

Whitfieldia lateritia, a pretty stove plant, with drooping racemes of pale orange flowers, is now in bloom in our collection. It is one of the fine acquisitions of Mr. Whitfield, in Sierra Leone. The plant is yet weak from recent importation, but it will prove a valuable acquisition.

Tecoma jasminoides rosea.—Are amateur lovers of beautiful plants aware of the elegance of this fine variety of the *Tecoma*? Unlike the species, young plants a foot high bloom freely in six-inch pots, and the delicate rosy tints of the corols, with their deeper-colored throat, are of the greatest beauty.

Beck's New Pelargoniums will be splendidly in flower in our collection from the present time, to the last of June, and amateurs of this most beautiful of plants are invited to examine them. *Aurora*, *Desdemona*, *Zanzummin*, *Isabella*, and other seedlings of 1845 are superb; but *Cassandra*, *Honora*, *Centurion*, *Blanche*, and others, seedlings of 1845, are surpassingly fine.

57. RHODODE'NDRON JAVA'NICUM *Bennett* Java Rhododendron.
(*Ericaceæ*.) Java.

A greenhouse shrub; growing five or six feet high; with yellow flowers; appearing in spring; increased by layers and grafting; cultivated in heath mould, loam, and sand. *Flore des Serres*, 1847, pl. 293.

Of certain families of plants which have long been inhabitants of our gardens, there has ever been a great desire to possess varieties with yellow flowers; the pæony, the camellia, the rhododendron, and others, are of this number. Recently, a yellow pæony has been introduced. Mr. Fortune brought home what is said to be a yellow camellia; and now we have, from Java, a true yellow rhododendron. A magnificent thing it is, according to the plate, but much more brilliant must the flower itself be. We cannot better convey an idea of its beauty than in a translation of the descriptive account annexed to the figure:—"The introduction of a plant like this is one of the highest good fortunes for our gardens, both as a distinct species, and as an ornamental plant. Botanists have, for some time, been conversant with it, from the description of it given by Mr. Blume, who first discovered it on the mountains of Salak, in the island of Java. M. Horsfield also found it on the volcanic mountains which traverse this isle, at an elevation of 4,000 feet above the level of the sea. M. Ad. Papeleu saw it in 1840, and sent to M. Van Houtte several plants, but they unfortunately perished on the route. It is to M. Lobb that we are indebted for the honor of its introduction in a living state to Europe,—an honor of the highest merit, for, without the fear of being taxed with exaggeration, we consider it

one of the most beautiful and important plants for the ornament of our gardens, which has been introduced for a long time. We have said it was one of the most important plants. In effect, may we not be permitted to think there is not one species so distinguished for its deep and unusual color, or for its brilliant foliage, covered beneath with curious starry scales, and who can foretell what a fruitful source of producing new varieties it will be, in the hands of our clever florists, by crossing with the rhododendrons of India,—those of Asia Minor,—of America, and of Europe? In the mean time, its large and numerous flowers, of a deep orange, scattered with several purple spots; its ten stamens of a bright crimson hue, relieved by a starry, rose-colored throat; its fine and ample shining foliage, of the deepest green, &c., will command the approbation of all amateurs without difficulty.”

It will thrive in the greenhouse, coming, as it does, from a high elevation, but its great value will be for producing new and elegant hybrids between our American species, which, without losing their hardiness, will be greatly enhanced in the diversity of their colors. (*Flore des Serres*, Dec.)

58. SCUTELLA'RIA VENTENA'TI *Hook.* Ventenats Scutellaria.
(*Lamiaceæ.*) South America.

A greenhouse plant; with scarlet flowers; appearing in autumn; increased by cuttings; cultivated in leaf mould, loam, and sand. *Flore des Serres*, 1847, pl. 295.

A pretty species, with spikes of scarlet flowers, appearing in autumn. “We have it,” says Van Houtte, “now blooming under our own eyes, at the moment we write (3d Nov.) It has been in flower more than *three months*, and we can affirm conscientiously, that it is, for the stove, truly a most ornamental plant, on account of the numerous terminal spikes of deep scarlet flowers.” It is readily increased by cuttings. (*Flore des Serres*, Dec.)

59. PENTARHA'PHIA CUBE'NSIS *Decaisne* Cuba Pentarhaphia.
(*Gesneriaceæ.*) Cuba.

A stove plant; growing two feet high; with orange-colored flowers; appearing in summer; increased by cuttings; cultivated in leaf mould, loam, and sand. *Flore des Serres*, 1847, pl. 297.

A very pretty gesneraceous plant, of a shrubby habit, producing a profusion of pendulous, orange-colored, tubular blossoms throughout the autumn months. The stem is erect, reg-

ularly and alternately branched, and the leaves, which are small and obovate, are produced in tufts of three, from the axils of which spring its numerous orange-colored corols. It should have the same treatment as other *Gesneriæ*, and is well worthy a place in every good collection. (*Flore des Serres*, Dec.)

60. *CONVOLVULUS TRICOLOR* var. *VITTATUS*. New Striped Dwarf Convolvulus. (*Convolvulææ*.) Garden Hybrid.

The well-known *Convolvulus tricolor* is one of the prettiest of our annuals, and, for grouping in masses with the petunia, is esteemed by all lovers of flowers. The present subject is a variety produced by M. Défougères, florist of Moulin, and the seeds first disseminated by Vilmorin, of Paris. It differs from its parent in having the limb of the corols magnificently banded with deep blue, some of the stripes extending quite to the centre: in other respects, it is like the *C. tricolor*: it is a fine acquisition to our annual plants. (*Flore des Serres*, Dec.)

61. *A'LLIUM CÆRULEUM* Pallas Blue-flowered Allium. (*Liliææ*.) Russia.

A hardy bulb; growing two feet high; with deep blue flowers; appearing in spring; increased by seeds and offsets; cultivated in any good soil. *Flore des Serres*, 1847, pl. 300.

A showy and desirable species of the allium, which will prove a fine acquisition to our hardy perennials, coming, as it does, from Asiatic Russia, where it was discovered by Pallas. It throws up a stem one or two feet high, terminated with a globular head of azure blue flowers. It is easily grown from seeds, or offsets from the old bulbs. A rather dry situation, well exposed to the sun, suits it best. (*Flore des Serres*, Dec.)

62. *TROPÆOLUM UMBELLATUM* Jameson Umbel-flowered Tropæolum. (*Tropæoleæ*.) Quito.

A greenhouse climber, growing six feet high; with yellow and orange flowers; appearing in summer; increased by the roots: cultivated in heath soil and loam. *Flore des Serres*, 1847, pl. 302.

The tropæolums are among the prettiest of plants, but yet it is rare to see a specimen in our collections. We hope they will soon be better known; trained over a balloon trellis, or even scrambling up some dry branch, the profusion of bloom will always repay all the attention bestowed upon the plants. *T. umbellatum* is particularly fine; the flowers being cylindrical, of a deep orange and yellow. (*Flore des Serres*, Dec.)

REVIEWS.

ART. I. *Strawberry Report, read before the Cincinnati Horticultural Society, August, 1847, and ordered to be published.* Pamphlet, 8vo. 14 pp. Cincinnati, 1848.

If there is any one subject with which our readers have been surfeited, it is the vexed strawberry question; and we are not sure but all of them would be glad were we to devote no more room to its consideration. So absurd are the notions of some writers, that we certainly do not deem them worthy of further attention. But, in the present instance, we have the deliberate report of the Cincinnati Horticultural Society upon this matter; and, if we did not think it desirable to enter at length into a review of the report, respect for so honorable a body would not allow us to pass by it in silence, especially as we are personally concerned in the question.

It is almost unnecessary for us to repeat that we have ever felt a great degree of interest in the cultivation of the strawberry: for more than *twenty* years, we have given this fruit more attention than we have bestowed upon any other, and, during that period, *every variety* of foreign or native growth, having any reputation, has been cultivated and examined under our own eye; with such experience, we flatter ourselves that we can speak with nearly as much confidence as any of the members of the committee, who drew up the report, and probably with more than some of them. Without, however, arrogating to ourselves an undue share of information, we proceed to as brief a notice of the report as its importance will admit of.

Our correspondent, Mr. Ernst, was chairman of the Committee, having associated with him Messrs. Geo. Graham, S. S. Jackson, John Lea, N. Shaler, S. Mosher, and I. A. Warder:

The Committee to whom was referred the investigation of the **SEXUAL CHARACTERS OF THE STRAWBERRY**, beg leave to report:—

That they have endeavored to discharge, in the most thorough manner, the duty imposed upon them, by investigating, with note-book in hand, the condition of various kinds of Strawberries, at the different stages of their progress, from the blossom to the ripened fruit, so as to observe any pe-

cularities of inflorescence, and watch the consequent effects upon the fructification. As an evidence of the fidelity with which your Committee have discharged their duty, allow them to say, that this Report is based upon more than two hundred and seventy recorded observations, which were made with critical accuracy, and as extended, in almost every instance, as it was possible to render them; hence, it may be safely assumed, that they have now sufficient data, and abounding testimony to prove the postulates they intend to lay down in this report. The whole subject has been so ably and so frequently explained to this Society and community, that there is nothing now left for your Committee, who only reiterate truths well established and generally admitted among us.

The first observations were made on the fourth day of last May, at the gardens of Messrs. A. H. Ernst, S. S. Jackson, Wm. Heaven, and N. Longworth, Esq., where were found most of the celebrated varieties so highly vaunted in the Eastern states and in Europe. In these gardens, the several kinds were cultivated with the greatest care, and kept as distinct as possible from contamination one with another; and as these cultivators have spared no expense in obtaining their stocks from eastern establishments of the highest note, you may rest assured that the several kinds are correctly marked, as they were received, unavoidable accidents and the errors of those who packed them, alone excepted.

Extended and repeated observations were also made at later periods throughout the season of fruiting, at these and other places, among which the "Garden of Eden" must be mentioned as a spot where many varieties are cultivated, and a great number of new seedlings are coming on; all grown with great care—the kinds being kept apart—indeed, so great is the tendency of this plant to spread itself by runners, that too much care cannot be exercised to keep the kinds separate until the grower has made himself perfectly familiar with the distinctions of foliage, pubescence, habit, &c., of each, and this will require close observation and a practised eye; though some varieties are sufficiently well marked in their characters. Thus, Hovey's Seedling may be easily recognized by any one upon a very slight acquaintance, and it is difficult for us to conceive how the Editor of the Horticulturist, who is supposed to be a practical gardener and botanist, could, by possibility, have thought he was cultivating the true Hovey's Seedling (*pistillate*) which he informs us (pages 85 and 160, vol. 1.) were covered with staminate flowers; unless, indeed, the source from which his bed was planted was impure, and contained some staminate plants which had not been recognized. For the want of this kind of practical knowledge, we would fain believe, rather than from any willingness to deceive their purchasers, our eastern cultivators have sometimes sent us different kinds in the same parcel, and in different parcels with the same labels attached, as has been observed by the committee in their recent investigations.

The committee, after carefully collating and reviewing the facts which they have observed, present *nine* conclusions or postulates deduced from their united observations, viz. :—

1. That there are many different varieties of the strawberry, which are characterized in part by the foliage, pubescence, mode of growth, and fruit, and also, by their *inflorescence*.

2. That the varieties of inflorescence, (the most important to the cultivator,) consist in the greater or less development of the stamens and pistils, respectively—upon which are based our terms and classification, "*staminate*" and "*pistillate*," or, more familiarly with the mass of cultivators, *male* and *female*.

3. That these classes are *permanent* aberrations from what the great Linnæus considered the normal condition of this genus of plants, as of its natural family *ROSACEÆ*.

4. That nearly all botanists (and among them our most enlightened modern writers,) have overlooked the important error of Linneus, and have simply copied after him in their descriptions of the strawberry, without verifying for themselves; while a plain, unlettered market gardener, but a practical and observing man, discovered the important fact, that, while in some plants, the flowers are apparently perfect in both sets of organs, one set is really defective, to a greater or less extent, and in others, the flowers which we style *pistillate*, have the stamens so imperfectly developed as entirely to elude a casual observation, and only to be discovered by a critical observer, and then, in most instances, found to be wholly abortive.

5. That no *pistillate* plant will bear a perfect fruit if kept entirely apart from staminate varieties.

6. That no *staminate* plants which we have yet seen, can be depended upon by the cultivator as heavy bearers, though, from some unknown causes, the pistils may be so well developed as to be followed by a good crop, some years, and in some situations.

7. That there is no such thing yet known to us, as a perfect-flowered strawberry plant, in which the blossoms will *all* be *uniformly* so well provided with both sets of organs as to be followed by *perfect* fruit every year.

8. That the only method of producing this delicious fruit, with any degree of certainty as to the result, is that now adopted by our intelligent cultivators, namely: to set out plants of both of the sexual classes; the relative proportions of each to be determined by experience, selecting such pistillate kinds as may prove of good size and flavor, and only so many staminate as may be found necessary for impregnation.

9. That the runners from a strawberry plant are as integral portions of itself, as the branches and buds of a tree; and, therefore, that we may always propagate any variety by this means, with as much certainty as we perpetuate any variety of apple or other fruit by grafting or inoculation.

These postulates, the committee proceed to substantiate, and they deny that any *staminate* variety will ever produce more than a fair crop;—the result of their observations on the flowers of such being 42 berries in 100, and only 17 of these perfect in shape! Really, we are constrained to say, our Cin-

cinnati friends do not understand the cultivation of the strawberry, or else they have not the true sorts cultivated under the same names at the East.

The views of the committee, as given in the last postulate, are correct, and they substantiate what we have repeatedly asserted since the completion of our own experiments.

Forty varieties are named as having passed under the examination of the committee, and the results of their observations are given of each. They are divided into *two* classes, STAMINATES and PISTILLATES. The average result of the former is as we have given above.

Passing over all the descriptions and other matter, we at once come to the portions of the report, which to us are more important than the discussion of the simple question of stamens and pistils.

Among the staminate varieties enumerated stands the following:—

Boston Pine (Mr. Hovey's *Perfect*) has 23 to 24 stamens; is hardy, and a great bloomer; sets $\frac{3}{10}$ ths of its blossoms; perfect in less than $\frac{1}{10}$ ths of its fruit, and $\frac{1}{10}$ ths of its flowers.

What confidence will any cultivator place in a report emanating from a Horticultural Society which commits such a manifest blunder as the above? Who raised "Mr. Hovey's Perfect," as the committee style it? Did any one of them ever see such a variety noticed in our pages—or described by us? No. If such a report can be of any value it must be correct in the names. To make a statement of the produce of a plant without knowing whether it is the genuine variety or not, argues a want of information on the very subject under discussion.

Hovey's Perfect is a misnomer, originated, we believe, in Philadelphia, and we are astonished that the committee, with Mr. Ernst at its head, should have made such an error.

Had the genuine variety passed under the notice of the committee, we could then have questioned the accuracy of their statement as regards the Boston Pine; but, as it did not, we will only name one peculiarity of this variety, which will show that the committee are not quite *au fait* upon the strawberry culture yet.

We will suppose that only 42 berries set and perfect their fruit out of 100 flowers; now it is not material that every berry should set, provided it is the character of the variety to push up *ten stems* or scapes to each plant, for, if each scape has ten flowers, then there will be *FIFTY* perfect berries,—full as much as *one* plant ought to bear. 'This is precisely the case with the Boston Pine; Hovey's Seedling, on the contrary, will rarely produce more than two stems, bearing each twenty berries, all, or nearly all, of which will be perfect, provided they are in the vicinity of staminate kinds. If the committee will examine our beds in the month of June next, or will authorize any one to do so for them, they will find that the Boston Pine is one thing, and the *Perfect* another—the latter, if we may believe the report, being very far from deserving such a name, by whomsoever given.

And lastly :—

Hovey's Great Seedling is now so universally known, and so generally cultivated, that it would be hardly worth while to refer to it again, were it not for the fact, that two of the leading horticultural journals have differed in their descriptions and accounts of it. From their observations of it, under various modes of culture, your Committee think, that, though it stands deservedly at the head of the list, still, its splendid appearance and size have been *overrated*. The largest ever exhibited here, was five and three-eighth inches in circumference; and this is a very unusual size. Nor can they confirm Mr. Hovey's accounts, in his August No. (1847), p. 363, that his "Seedling, under ordinary treatment, measures *FIVE AND A HALF*" inches in circumference; and this expression, from the connection in which it stands with preceding words, means the *average* size. Whereas, all cultivators of this fine variety have been forced to regret, that, after the first and second berries, the size should diminish so rapidly, as it does with us—under our ordinary culture—so that, when exposed for sale by the quantity, those persons who seek it for its size alone, are frequently disappointed. It is so deficient in flavor, that our epicures purchase some of the tart or musky sorts, to eat with it. Another peculiarity they have not seen mentioned, but which is familiar to all, is its short period of ripening; the best berries are all gathered at the first picking; indeed, there are few left for the gleaners.

This is blowing hot and cold with the same breath, How can a variety "deservedly stand at the head," and yet be "overrated," only "2½ to 3 inches in circumference," so

"deficient in flavor," (query, acidity,) and ripening off so rapidly that "the best berries are all gathered at the first picking." A strawberry as large as a pumpkin, with all these *defects*, would stand at the *bottom* of the list, as the committee well know. It appears to us like a species of deceit for a committee of a Horticultural society to place a variety "deservedly at the head," which does not, in their opinion, belong there—no matter what others may think. No, it would at least have appeared more honest, to say it had been over-rated, and did not come up to its reputed character.

In regard to our statement as to the size of the berries, which the committee say they cannot confirm, we reassert that, "under ordinary treatment, the berries do measure *five and a half inches*." It is not an unusual size. No reasonable person ever supposed that we intended the product of a *whole* crop would "average" as large, but that that would be the measure of all the principal berries of the *first* picking. Hundreds of berries were exhibited last year before the Massachusetts Horticultural Society, none of which measured less than five inches, six berries weighing *three and five-eighths ounces*. Capt. Lovett, of Beverly, exhibited *one quart*, containing only *thirty-eight* berries. (Vol. X. p. 315.)

It would be wasting room to notice the other defects which the committee name; but, to show that they do not understand the cultivation of strawberry at all, or that their soil or climate is not adapted to it, we ask any of the committee to turn to our volume of last year, (XIII. pp. 335, 378 and 380,) and they will there find that several individuals exhibited the fruit for *THREE SUCCESSIVE WEEKS*, each time having berries measuring *five inches*. Will the committee call this "gathering all the berries at the first picking with but few left for the gleaners?" One of the most valuable qualities of this variety is the long time it continues in bearing, being, at least, *one week longer* than any sort yet known.

Will the committee have us believe that the report is a calm and unprejudiced exposition of their views? Or shall we attribute their opinions, like those of the Rev. Mr. Beecher, who undertook to falsify our views, to a narrow and sectional feeling? Neither of these we would be willing to believe, and our conclusion is, that their cultivators do not understand the

management of the plants, or the climate of Cincinnati is particularly uncongenial to this variety. Everywhere else in the country, the seedling is all we have ever claimed for it.

MISCELLANEOUS INTELLIGENCE.

ART. I. General Notices.

On the Culture of Tall or Climbing Roses.—If we wish to convey correct ideas of plants, we must adhere to botanical descriptions, and not to terms used in common conversation; for we find the term *tree* used in speaking of ligneous, herbaceous, and even annual plants. We have tree-pæony, tree-violet, and even tree-mignonette: no wonder, then, that we should have tree-roses.

The standard rose is generally termed a tree-rose; and, before we go further with the subject, it may be necessary to state, that "when the branches are perennial, and supported upon a trunk, a tree is said to be formed."

If I recollect rightly, Loudon has somewhere set the boundary mark for a tree at from "four to six inches diameter, with a single bole or stem." Now there are rose-plants here with stems six inches in diameter; still these dimensions do not constitute them rose-trees; for the common laurel will attain a diameter of six feet, and form an enormous head, yet the normal form of the laurel, as well as that of the rose, is decidedly a shrub; and accordingly, in botanical works, we find them constantly so named. The largest rose-plant to be met with, scarcely amounts to the character of a small tree, (*arbusculus*;) by any reasonable stretch of courtesy. But I am reminded to get rose-plants with the appearance at least, and with the size of head of a tree (arbor) aye, even of such a tree as the princely cedar, so graphically portrayed by Ezekiel in his vision of the fall of the kings of Egypt and Assyria; and if the fall of such a tree be terrible to behold, surely its standing clad with roses, would be majestic and goodly fair to see.

The rose is unquestionably the most popular flower known, and its geographical range embraces, according to Loudon, (Arb. Brit.) Europe, and the temperate regions of Asia, Africa, and America: in all these, it is said to be found wild, but not in Australia. Now I have it from an eye-witness, that, in the wilds of Australia, the rose is seen in abundance, in the form of sweet-briar; it seems, therefore, to be as universally distributed as it is universally admired. From the language of holy writ, it is clear that the rose was held in high esteem in the days of King Solomon; for, if we compare the sentence, "I am the rose of Sharon," as rendered by King James's translators, with the same sentence in the Douay version of the Bible, "I

am the flower of the field," and add the sentence, "I was exalted as a rose-plant in Jericho," (Eccles. xxiv. 18) we may conclude, that, in the valley of the Jordan, there were fields of roses, and that the rose was there held in such favor as bordered on veneration, and this 3,000 years before our day. In Geramb's Pilgrimage to Palestine in 1831, we find the following passages:—"The plain of Sharon which I traversed, so extolled in Scripture, was enamelled with flowers,"—"Rama, nearly on the borders of the plain of Sharon, is in a delightful situation,"—"The weather was brilliant, and reminded me of the beautiful spring days of Italy;" and farther on, he adds, that, in climbing the hills of Judea,—"where there is not a trace of a road or of a plant save a few olive trees and some oaks, and these look as if scathed with the lightning,—the eye, saddened with the sterility of the soil, needed some relief, and he turned from this scene of rocks, piled one upon another, to look back at that beautiful plain of Sharon and the sea which bounds it." We may now see the force of the phrase in the inspired song, "I am the rose of Sharon;" for, if Sharon be thus lovely in ruin and under oppression, and after earthquakes, plagues, and plunderings, surely its rosy morn and its palmy day must have been glorious.

The Romans are said to have rioted among roses, and throughout Christendom the rose has constantly been cultivated around the dwellings of both rich and poor.

We read glowing descriptions of "*Syria, land of roses*," yet we find, from the clearest evidence, that England boasts many a splendid rose, unknown and unsurpassed in Syria. The materials are in our own hands, and therefore there is no reasonable cause to hinder us from realizing fields of roses, aye, and trees of roses large as our wishes. I need not say that this cannot be accomplished if we are to confine our ideas of a rose-tree to the tuft of tiny rose-twigs on a dog-rose stem tied to an iron poker or a square stick, whose outline, (especially in winter) resembles that of a besom, with the handle in the earth and the brush-part in the air.

Let no one imagine that I wish to speak slightly of the ordinary culture of roses. I only wish to push the subject far beyond its present limits, to carry roses into fresh pastures, and unite them to *living* stakes or props, as "vines are wedded to their elms" in Portugal and Spain.

The ivy, standing in its own strength, is but a sorry shrub, and when unassisted with props, or unattended with culture, it only creeps and clambers, a lowly, uninteresting evergreen, forming a monotonous mass of dense and dingy foliage, draining the earth of moisture and nourishment, and thereby starving outright every vegetable in its vicinity which it had failed to choke with its fleece of leaves; yet we find the ivy, as at Wrotham Park for example, standing on the lawn supported by its own stem, and forming a fine globular head. There are ivy trees here 30 feet high, with a conical outline like that of the Arbor Vitæ. These examples may show how the outlines and habits of plants may be altered by subjecting them to a particular mode of treatment in the training and propping. The honeysuckle, unassisted, is little to be admired in its squat and shapeless mass; yet every one will bear witness to its charms when seen to bloom entwined on tree or

bower. A mountain-ash in the grounds here has held up to admiration a plant of the honeysuckle high and wide for many years. A tall spruce fir propped for a long time another honeysuckle close to the above-mentioned specimen. I mention this evergreen tree with its honeysuckle, to prove that climbers or twiners will live and flower among the spray of evergreen trees; and further, to show that this is not a new combination, I need only quote the couplet,

"Not a pine in my grove is there seen
But a woodbine entwines it around."

Cottam and Hallen's cast-iron rose-stake may be regarded as perhaps the most ornamental and economical *dead* prop in use. This elegant stake I quote here, that I may compare its cost with the price of those I am about to introduce, and likewise that we may continue its services to prop the tiny growing roses worked upon other rose-stems, in order to bring them near the eye, so that ladies may closely examine the rose without stooping, and without being tempted to pluck it; for, of all the casualties to be guarded against, that of not leaving the rose upon its stem until the flower has faded is the most important. The price of this stake, six feet long, and strong in proportion to its length, is said to be 1s. 6½d. (*Encyclopædia of Gardening*.) The square heavy heart-of-oak stake, if sufficiently strong to be durable, and well painted, will cost little less than the iron one above quoted. The drawbacks to dead props are, first, the necessity for continual painting, then rust in the iron under ground, and rot in wood at the surface of the ground, the too slender form of the iron stake, and the unnatural square form of the wooden one, so much at variance with the nicely-balanced and symmetrical proportions of live timber, whose wooden trunks are never square like our wooden rose-prop, neither are they so *fine-drawn* as the fashionable form of a standard rose with an iron prop.

The mountain-ash, when growing as a tree, is admirably suited to prop a climbing rose. Its foliage is pinnate, and not to be easily distinguished from the foliage of the rose; the color of its trunk and that of the stem of the rose are the same ashy grey; in size, it is decidedly a small-growing tree; in habit, it is stiff and formal, with spray full of antlers or little hooks, all tending upwards, just as if Dame Nature had made a tree of pegs to hang her rosy mantle on. Now the price of these living props, three feet high, is THREE FOR A PENNY, and six feet high, only a penny each. Good plants of mountain-ash were delivered here, carriage-paid, this season, at 25s. per 1,000, three feet high, and larger, sizes at 1d. each, as I have stated. Now, lest any one should imagine that I think of filling up a flower-garden with mountain-ash trees, I must beg leave to state, that, where there is room for the rose-trees that I propose, there will be no lack of space for the stakes or props, for they will be within the rose-trees. These rose-trees were never intended for small gardens, and scarcely for large ones: they are the gigantic materials for fields of flowers high and wide, of long and deep avenues, the foreground figures fair and fragrant in the glades and dells of park scenery, where rides and drives invite. The

bramble is another brother of the rose family, and this, as well as the mountain-ash, rambles at large by ravine and crag, growing freely in any reasonable situation, and in spots where neither grazing nor tillage can be carried on. Surely, then, we may reasonably hope to establish a climbing rose in a locality where two brothers of the same family already flourish.

The rose and its prop must be planted young in well-prepared earth; for, be it remembered, they will just grow and flower in proportion as they are fed, and therefore such a spread of foliage as is here expected requires something like a vine-border to give the necessary supplies of food, &c.

I do not write to please those parties who know so little of rose-culture as to imagine that roses will not climb very high trees and flower freely. The *Rosa arvensis* climbs to the top of an arbor vitæ in the grounds here 20 or 30 feet, and its long and gracefully bending shoots may be seen dangling from the branches of high trees in the woods here and elsewhere. Loudon mentions (*Arb. Brit.*, p. 790) Eastwell Park, Pains Hill, Claremont, Pepperharrow, Spring Grove, and Fonthill, where similar specimens may be seen of *Rosa arvensis*, and particularly the Ayrshire and the ever-green roses, producing a fine effect, flowering, and even forming festoons among high trees. I need scarcely add, that, in length and strength of vine, many of the cultivated roses equal and even surpass the wild rose. I have seen climbing roses against a wall here and at other places make shoots 20 feet long in a couple of seasons, and flower profusely; therefore, if the *Rosa arvensis* and its varieties climb trees of their own accord, surely art might train the twigs of other climbing roses in a track where nature unassisted prompts them to run. There is no plant of easier culture than the climbing rose; for all roses grow freely from cuttings, and thrive well in the common corn-land of the country, and even in places and soils where corn would scarcely be produced. They never fail running and flowering every year; and this running propensity, or, in other words, this truly desirable quick habit of growth, has hitherto caused this section of the rose family to be excluded from collections, or, if not excluded, to be unmercifully cut in, in order to keep them in bounds, which cutting, owing to the peculiar habits of this section of roses, amounts to nothing less than cutting off their heads; for, if they are cut at all, the head or flowering part, being at the tip, is sure to be sacrificed, whether the cutting be only an inch or a pole in length. The climbing roses should either have a building to climb on, as a ruin, a bower, a wall, a trellis, &c., or, failing these, they may readily and cheaply be accommodated with a tree to climb for the small outlay of one penny. This arrangement is not confined to the culture of climbing roses only, but should extend to the culture of climbers of all kinds; for, at the present time, climbers cannot be grown in gardens, from sheer want of any thing to climb upon. The grape-vine family, nearly all hardy, but seldom grown, produces the most beautiful foliage imaginable as a climber; but, alas! for lack of the prop, we lose the service of the vine. In an economical point of view, the vine is worthy of a place with a tall yew hedge to back it, and, thus situated, something more than leaves would repay the planter. Any one who has eaten grapes cooked, even when not fully ripe, will allow that

they are superior to any other tart-fruit, and, as they would come in late in autumn, could not fail to find a welcome at table when our native fruits were ripe or dead. The white bryony formed an object of the greatest beauty, growing up the face of a tall clipped yew hedge at Caenwood, in the kitchen-garden. This plant attached itself by its tendrils to the hedge; and, as it belongs to Cucurbits, it gives an admirable lesson to cucumber growers, for it formed a perfect fan, with rays nine feet long, *without the aid of man*. The cucumber is a plant adapted by nature for a similar situation; for its beautiful tendrils tell that they were never made to crawl, but to climb. But I need not go farther than to the pea for an example of the value of living props: hundreds of persons would grow peas if they had sticks to prop them with. I saw a neighbor with a row of peas well stuck with a couple of rows of living beans, which, by a special blunder, had been sowed after the peas were covered with the soil.

The cultivation of climbers is a field too great to be entered upon here, and yet too important to be passed over in silence. I have, therefore, thrown out these hints in passing, and leave it to the lovers and admirers of this class of plants to carry it out, resting assured that the scarlet trumpets of that splendid climber, the trumpet-flowering honeysuckle, alone, will proclaim by their few and feeble specimens the truth of what I am endeavoring to show—namely, that, for want of a prop, we lose the services of the most beautiful plants that could adorn a garden, ay, and the services too of valuable esculents. But to return to the rose. The umbrella form of trellis is well suited to show to advantage certain kinds of roses. Now the dwarf or weeping elm, engrafted on the common elm, forms an elegant head of this form; and as these artificial drooping-headed trees are monsters, and grow slowly, they may be kept in dressed ground in small compass for many years. The one which I have before me has been four years planted; and one or two others, about ten years planted, have yet but very small heads. I may here mention that the young shoots of the elm resemble an immense pinnate leaf, and thus the leaf of the rose harmonizes better with the foliage of the elm than I was led to expect before I made the comparison with the rose and elm twigs united.

The weeping ash makes an admirable trellis for a climbing, or rather a trailing rose, and, having pinnate leaves, the harmony of the foliage with that of the rose is complete. Nothing but a figure drawn accurately to a scale can give an idea of the excellent habit of this tree, standing as it does on a clean single stem, and forming a globular head with a fine bold outline, which may be varied by pruning to form an umbrella or semi-globular head, or may be allowed to feather down to the ground, and form an egg-shaped tent.

Every weeping tree gives the idea of being depressed, and its very name "weeping" implies a lack of comfort; therefore, it should not be alone, but have a partner, whose rosy face should look upward, and at the same time look light and cheerful. To intertwine a weeping ash with roses would seem to mingle joy with its weeping, and make a striking contrast, since it

could not fail to excite surprise to see a tree that usually hangs its head, and never shows a flower, come forth at last arrayed in such a bloom.

Various devices have been resorted to to hide the unsightly shank or stem of the standard rose, with more or less effect. I have sowed sweet peas around some, and planted other climbing plants round others, and have succeeded very well sometimes with such twiners as the ipomœas, &c., forming a cone of elegant flowers, and making the rose-stake serviceable to support a succession of flowers after the roses had faded. Still these creatures of a day, the ipomœas, &c., deserted me in my utmost need, for the least foul weather made them useless; and if they grew freely they would not stop at any reasonable length, and, being so delicate when young, the smallest accident was sufficient to make a blank. The want of evergreens in a flower-garden in winter has long been felt, and, in short, to obtain a succession of beautiful living objects is the aim of every gardener in planting a garden.

Now in this garden there exists, whether by design or accident I know not, a thicket of tall yew trees, and in front of these some very tall rhododendrons, and, drawn up between the yews and the rhododendrons, there stands a fine rose-bush, and, after the rhododendrons have flowered and faded, the rose blooms in the face of this "dismal grove of sable yew." And it is to this contrast of bright rose-color against dark green that I would invite notice: it sets off the rose to the greatest advantage, and always attracts attention, it being altogether unlooked for from such a sombre subject as the yew to wear a blush or other rosy hue upon its sullen face. Now, although the common yew tree be well adapted to support a climbing or other rose, from its patiently enduring to be clipped or pruned into any reasonable or even unreasonable form, I would prefer the Irish yew, and make the head of the rose stand high enough to bloom above the yew. It is the ordinary system that nature follows to elevate the panicle or cluster of flowers of a plant above the foliage. By this combination, we get rid of the unsightly rose-stake, by effectually hiding it in the thick foliage of the yew, and, instead of a leafless rose, with a long grey switch of a stem tied to round iron or square tree all the winter, we have an elegant evergreen tree, admirably suited to the stiff formal lines of geometrical flower-gardens; and surely a crown of roses, if properly worn, would set off to advantage the staid and sober virtues of the upright yew, neither would it derogate from its dignity thus to become handmaid to the queen of flowers.

The *Robinia pseud-acacia*, or common yellow locust-tree, having beautiful pinnate foliage, will make an admirable rose-tree; and the apple and pear trees, beautiful and rosy in themselves both in flower and in fruit, in certain situations might be employed with excellent effect to prop roses.—(*Journal Hort. Soc.* Vol. II., p.)

ART. II. *Retrospective Criticism.*

The Herbaceous Plants of Massachusetts. (Vol. VII. p. 227).—Soon after the publication of the *Herbaceous Plants of Massachusetts*, a cursory

review of the work appeared in the "*Magazine of Horticulture*," &c., on which I wish to offer a few remarks. Though several years have since elapsed, I had not seen the review till a friend called my attention to it a few weeks since. As the *Magazine of Horticulture* will, I hope, long be known, and be evermore useful, I ask, for the following remarks, a place on its pages, that the readers may understand the subject when the present actors shall have passed away.

1. The report was to contain the names of all the *known* indigenous plants of the state. I was not at liberty, had it been desirable, to select the most interesting, and to attempt to pursue the course adopted by Dr. Harris on the insects, which is deservedly commended in the review.

2. The *common* cultivated plants were to be introduced into the report, without implying that a multitude of rarer exotics were not cultivated. Hence it was not proper to take as a standard the extensive and splendid gardens near Boston, where *garden* and *parlor* were used in respect to any cultivated plants. These *exotics*, rare over the state, would alone have filled a volume, and not been suited to the object.

3. The descriptions were to be *popular*, and little of the pure language of botany to be used. It was very difficult to adopt any satisfactory plan, without a failure to please mere botanists and horticulturists. Still it had not then been discovered that the *popular* course would be the regular *systematic* one, and there was no known alternative. I was not insensible to the imperfections the botanist would perceive, but, under the *directions*, I felt that I had no room for selection.

Some unknown writer appreciated the whole subject, and published, in the *American Journal of Science and Arts*, Vol. 41, p. 381, a clear and candid view of the report, such as a knowledge of the case required. Still, the writer in the magazine doubtless expressed his honest convictions, and has my regard. It was not then known that the plan of my colleague, Mr. Emerson, in his excellent Report on the *Trees of Massachusetts* would be *popular*, though the fact has proved it.

4. Though the *rose* may be ranked with the shrubs, it was agreed, for obvious reasons, that that genus should be placed where it was.

5. A writer of some distinction has lately published, and in the discussion the last winter, in your city, on the grasses, it was repeated, that *clover* is an *important grass* of the northern states. As the grasses yield so much food, many, who are not versed in botany, think that clover is a grass, and put into the same class beans, potatoes, yams, and many more. I trust this will satisfy the reviewer on a sentence he rather captiously condemns.

I trust these reasons, given without asperity, will secure their insertion in your valuable work.

6. Into one important mistake I was inadvertently led, which is easily corrected, and which my friend, Prof. Gray, was so kind as to point out to me. As Prof. Hitchcock had already published the *Natural Orders* of Lindley, at the end of his *Geology of the State*, it seemed desirable not to

change them. But *Order* 51, *Loaseæ*, p. 49, should have been omitted, and the genus, *Centaurella*, *MX.*, should be placed at the end of *Gentianææ*, p. 149.—*C. Dewey, Rochester, N. Y., April, 1848.*

ART. III. *Massachusetts Horticultural Society.*

Saturday, March 4, 1848.—The report of the meeting of the Society on this day was not received in time for our last number : we now append the same.

An adjourned meeting of the Society was held to-day—the President in the chair.

F. Dana, Roxbury, was admitted a subscription member.

Meeting dissolved.

April 1st.—The Stated Quarterly Meeting of the Society was held to-day—the President in the chair.

C. W. Dabney, Esq., of Fayal, presented the Society with a small quantity of Portugal onion seed, and the thanks of the Society were voted for the same.

The Finance Committee reported that, in accordance with a vote of the Society, they had purchased fifteen shares of the Old Colony Rail Road, at \$93½ per share, amounting to \$1,398 75, and the same had been paid by the Treasurer. The Committee also reported that the Society's proportion of new stock in the Worcester Rail-road would require the payment of several hundred dollars, and, in consequence of this, only the above amount had now been invested.

They likewise reported that the Store had been re-leased to the present occupant, for two years, upon the same terms as before.

The President and Recording Secretary were authorized to procure tickets for the use of the members, and for the purpose of sale, for admission to the Hall, upon the same terms as in previous years.

Adjourned two weeks, to April 15th.

Exhibited.—**FLOWERS :** From J. Quant, a fine plant of the *Schizanthus*. From P. Barnes, nine pots of pansies. From Mr. Liversedge, a fine specimen of the double Stock.

GRATUITIES were awarded as follows :—

To J. Quant, for *Schizanthus*, \$1.

To Mr. Liversedge, for Stock, \$1.

VEGETABLES : From S. Bigelow, a brace of Latter's Victory of England cucumber, from seeds sown February 3d.

April 8th.—*Exhibited.* **FRUIT :** From T. Needham, Keen's Seedling strawberries.

VEGETABLES : From T. Needham, a brace of Weedon's prize cucumbers, a brace of Burns's Man of Kent, and a brace of Manchester prize cucumbers.

April 15th.—An adjourned meeting of the Society was held to-day—the President in the chair.

The Committee of publication reported that No. 2 of the Society's *Transactions* was ready for delivery, and that the drawings had been done by hand at an increased expense.

Adjourned three weeks, to May 6th.

Exhibited.—**FRUIT:** Mr. J. F. Allen exhibited the first grapes of the season, which were of fair size and color; the varieties were Black Hamburg and Miller's Burgundy. From T. Needham, Keen's seedling strawberries. From S. Weld, Roxbury seedling apples, of fine appearance and pleasant flavor.

VEGETABLES: From T. Needham, a brace of Weedon's prize cucumbers, *twenty-one* inches in length; also, Burns's Man of Kent, Black Spine, Sion House, Young's Champion, Hamstead Black Spine, and Manchester prize. From S. Bigelow, new potatoes, and a brace of Black Spine cucumbers.

HORTICULTURAL MEMORANDA

FOR MAY.

FRUIT DEPARTMENT.

Grape Vines will now require considerable attention. Early runners will now have set their fruit, and the berries will be sufficiently swelled for thinning: this will require to be done carefully and well, if fine bunches are desired; indiscriminate thinning, without any reference to the natural shape of the clusters, will greatly injure their appearance. On this head, we must refer all cultivators to our article in our last volume, (XIII. p. 309,) in which we have given some advice upon the subject. As soon as the bunches are all thinned, syringing may again be commenced, and the walks well watered once or twice a day in all fine weather, unless the situation is damp: keep the laterals well pinched in to one joint. The border may now have a dressing of guano, and be carefully forked over. In cold houses, the vines will now be breaking their eyes, and will need liberal syringing, both morning and evening: nothing is more favorable to an even breakage of the buds than this: if the tendency of the sap is to the top, then the head of the shoot should be bent down, bringing it back again to its place after the eyes have all pushed. Give air in good season, but close early in the afternoon. Vines in the open air will now need attention. All the shoots should be carefully tied up to the trellis, and any weak wood should be cut out; disbud where the eyes are too thick. Let the soil be enriched with good manure or guano, and carefully dug.

Raspberry Vines should be firmly tied up to strong stakes, cutting off the shoots to the length of four or six feet, according to their strength: manure and spade the ground.

Strawberry beds should be carefully weeded, and put in good order: new beds may be made all this month.

Grafting Pear and Apple trees may be continued all this month, if the scions are in good order.

Currant and Gooseberry bushes should be very severely pruned ; for the want of this, many bushes are wholly spoiled, and the crop lost.

Pruning trees, where there is a large collection, will occupy a great deal of time, and it should not be done too hastily ; for want of a little thought in pruning, many trees are much injured in their appearance.

Insects should be looked after ; a few hours' neglect now will require whole days to extirpate them later, besides the damage which they will have done to the trees.

FLOWER DEPARTMENT.

Camellias will have completed their growth, and will be forming their flower-buds : as soon as well developed, the plants should be immediately removed to the open air. Frequent syringings should be given in order to keep the foliage bright and clean, and free from insects.

Pelargoniums will now be out in all their beauty ; the plants should be nicely staked out if not already done, and an abundance of air should be given ; a slight shade in the middle of the day will keep the blossoms in fine order for a great length of time. Keep the green fly down ; and occasionally, not too often, give a little weak guano.

Fuchsias, now growing rapidly, should be shifted into larger pots, tying every plant up to a straight stake. Water with guano.

Achimenes and *Gloxinias* will now begin to bloom, and will require re-potting.

Cactuses, as soon as done flowering, should be carefully repotted.

Neapolitan Violets should be taken up, divided, and new plantations made, selecting a cool, half-shady place.

Dahlias may be planted out the latter part of the month, before which time it is scarcely safe to risk good sorts.

Tender Annuals, such as *Balsams*, *Coxcombs*, *China asters*, *Amaranthus*, &c., may now be planted out.

Carnations and *Picotees* may be planted out now in the open ground in beds, where they will bloom freely.

Roses of the tender kinds should be propagated now from cuttings.

Chrysanthemums may yet be propagated from cuttings or layers.

Gladioluses, *Tube-roses*, *Tiger-flowers*, and other spring bulbs, may be planted out now.

Daphnes may now be propagated from cuttings, and the plants shifted into larger pots.

Annual seeds of all kinds may now be sown in the open border.

Pansies, wintered in frames, or raised from seed, should now be planted out in a good strong soil, in a cool and moist border or bed.

Ixias and *Sparaxis*, done blooming, may be placed away on a dry shelf, under the stage, or in a dry room.

Poinsettia pulcherrima, and *Euphorbia Jacquiniaeflora* should now be headed down, and they will make fine bushy plants. Put in the cuttings now, if a larger stock is wanted.

Japan Lily seeds may yet be sown with perfect success.

THE MAGAZINE OF HORTICULTURE.

JUNE, 1848.

ORIGINAL COMMUNICATIONS.

ART. I. *Notes on Gardens and Nurseries in the Vicinity of New York, Philadelphia, Baltimore, and Washington.*
By the EDITOR.

IN the autumn of 1845, we visited several gardens and nurseries in the cities above mentioned, and our notes and memoranda, made during our visit, we gave in our volume for 1846, (XII. p. 241.) Since that period,—little more than two years,—there has not been a very great change in the state of gardening; but a recent visit has enabled us to jot down a few notes, which may not be without interest.

Washington, D. C., March 10th, 1848. Experimental Garden of the National Institute.—This garden, under the superintendence of our correspondent, Mr. Breckenridge, is well repaying the expense attending its management: through the exertions of Mr. Burke, the Commissioner of Patents, thousands of papers of seeds, raised in the garden, are distributed, through the representatives of the several states, annually assembled in Washington, and handsome, and even rare and choice, kinds of seeds find their way where, through the ordinary course of trade, they would not be probably introduced for years. In a country extending over so vast a territory as ours, and deprived, as we are, of cheap postage, this medium of sending seeds is of the greatest importance; for it brings to immediate notice many varieties which would otherwise remain but little known for years: thus the beautiful Chinese primrose, the brilliant portulaca, and the varied verbena, are

found growing in the remotest parts of Texas, Wisconsin, and Maine.

Mr. Breckenridge is now, and has been, for some time, so much engaged upon the arrangement of the plants, collected by the Exploring Expedition, for publication, that he has not been enabled to devote as much time to the garden as usual; yet we found every thing healthy, and in good order.

In the houses, many plants were in bloom, and presented a gay appearance. The Chinese primroses, both white and purple, were large, finely fringed, and beautiful; a capital stock to grow seeds from, which he does in considerable quantity. *Chorizema cordata* is one of the finest flowers of this elegant group: small plants were quite covered with flowers; this species seeds freely, and many packages have been distributed: its deep-colored blossoms present a fine contrast with the yellow and orange tints of *C. varium* and others. The acacias were very showy, especially *A. linearis*.

In the hothouse, several pitcher-plants (*Nepenthes distillatoria*) were rambling about with the greatest luxuriance: one planted out in the bark bed had reached the top of the house, and others in boxes had made numerous shoots. These delight in a very loose soil, with plenty of drainage; many small plants have been raised from layers, and sent to various parts of the country. Several orchideous plants were growing with the greatest luxuriance, and an *Oncidium*, sp., was in flower.

The spring was yet exceedingly backward, the thermometer indicating 10 or 12° of frost. The Tea and Noisette roses had, however, wintered well, and were now swelling their buds. Mr. Breckenridge has some promising seedling roses, and we hope to give some account of the best after the rose season. Mr. Breckenridge has an excellent plan for protecting hybrid perpetual roses, and other plants which need it: this is to thatch, or completely surround, the plants with branches of cedar or other evergreens, and, drawing the tops together, bind them so as to throw off the rain. This plan seems to succeed better than straw; it admits of a free circulation of air and is not so liable to hold moisture as a close covering of straw. It sufficiently guards the plants from the sun, which is often more injurious than severe cold.

Garden of Dr. J. S. Gunnell.—The camellia now commands the attention of Dr. Gunnell to the exclusion of nearly all other plants. Some foreign varieties of note have been added to the collection, but the principal plants we found to be seedlings. An immense number of these filled the house, from plants just emerging from the seed to those six feet high, and now just blooming for the first time. From some of the impregnations, promising kinds are anticipated; and, if we may judge from the foliage, Dr. Gunnell will not be disappointed.

We have already given Dr. Gunnell's views in relation to the peculiarity of foliage of some kinds of camellias, (p. 161,) and, as we have proved them in our practice to be correct, there is but little doubt some new and choice seedlings will be the result of his labors. C. var. Mrs. Gunnell is well known as one of the most beautiful white camellias yet produced, and Gen. Washington is also a superb variety. With such results already achieved, there is every hope for many unique and choice seedlings.

Dr. Gunnell adopts what we should think an excellent plan to bring seedlings into bloom early: this is, to stop the young growth, by pinching off the end when about half grown: this causes the wood to mature, and form new buds. It is well known that most seedlings have a tendency to grow rapidly, without sometimes showing buds till six or eight years old: but, by getting ripe wood early in the season, the plants have a much greater tendency to form flower-buds. Many fine varieties were in flower, but we had not time to note them down.

Baltimore, March 15th.—Our time in Baltimore was limited to a few hours, and we only had the opportunity to call on Messrs. John and Samuel Feast.

Garden of John Feast.—Mr. Feast's houses, as usual, were filled with a healthy stock of plants of all kinds. The camellias, which fill one large house, were looking in better condition than when we saw them in the fall of 1845. Some new seedlings have also flowered, which are said to be very fine. A white, just opening, was remarkably fine; it is called Mary Feast. The cactuses fill part of a small house, and were exceedingly well grown. The stock of roses was large, and the varieties among the best.

In one of the houses, we saw several plants of *Justicia persicæfolia*, a fine showy species, with yellow flowers. The night-blooming jasmines were very pretty, with their branches loaded with white berries. A new crassula, with white flowers, Mr. Feast stated to be very beautiful. Mr. Feast's collection is not so remarkable for novelties, as for an abundant supply of the popular and generally admired kinds of flowers.

City Garden of S. Feast.—Our time did not give us an opportunity to visit the out-of-town garden and nursery, but, connected with his seed store in Charles street, is a large greenhouse, which we found filled with a good collection of plants. Mr. Feast has quite a lot of seedling camellias, and we were desirous of seeing them. Since our visit, he has forwarded us a most beautiful seedling, which flowered this year for the first time, and which we have noticed in another page.

[*To be continued.*]

ART. II. *The Culture of the Fig.* By the EDITOR.

THE growth of the fig under glass has recently attracted considerable attention among cultivators. Flourishing well in graperies either with or without heat, and producing abundant crops, it has been much sought after, and is greatly esteemed as a delicious addition to the dessert.

With the increasing desire for the cultivation of the fig, there is also a want of practical information in relation to its growth in order that the greatest results may be obtained. For a long period, it has been cultivated somewhat extensively in England, and the general management of the trees is detailed by the principal writers upon gardening. To these sources American authors have been indebted for their information upon the subject.

Our correspondent, Mr. J. F. Allen, of Salem, has been highly successful in his treatment of the fig, and annually produces two fine crops on a large tree on the back wall of a vinery, which is forced in December. The first crop matures

in May, and the second in summer. The variety is the Black Fig of the Azores, an exceedingly rich and luscious fruit. This has been, until recently, the only variety cultivated around Boston.

Two years ago, we received several of the choicest varieties from England, such as the Brown Turkey, Black Ischia, White Marseilles, Brunswick, White Ischia, &c. These all bore finely in pots last year, and are again covered with young fruit, and, when we have completed our experiments, we shall give our readers the results of our practice.

The present remarks are merely introductory to an excellent paper on the culture of the fig, in the *Gardeners' Journal*, being the substance of an essay read before an association of gardeners at Chelsea, near London; and we commend it to the attention of all lovers of this fine fruit:—

“Mr. Slow read an Essay on the Culture of the Fig. He first gave a brief history of the fig; and then directed attention to the soil suitable for its growth, as the first point for consideration. That which he recommended was the turves from an old pasture, without any manure. The superiority of turves, in chemical and physical properties, to any other description of soil, was, as he observed, now a well-established fact. Figs grown in this alone are not over-luxuriant, a circumstance which must always be guarded against. The mode of propagation recommended was by layers, it being the quickest mode of getting bearing plants, as shoots of one or two years' growth, if laid down, will make abundance of roots the first summer, and admit of being taken off in the autumn, and placed where they are finally to remain. The sorts of figs recommended as the best suited for hothouse purposes, were the Brown Ischia, Nerii, Marseilles, White Genoa, and Lee's Perpetual. The essayist then gave his general treatment of the fig in hothouses as follows:—The time recommended for pruning was December; after pruning, every branch throughout the house to be tied out regularly. Very little pruning is required in winter, if proper attention is paid to pinching and stopping the shoots in summer. About the first week in February, he would fork up the surface of the border to the depth of three or four inches. He would com-

mence with very gentle fires if the weather was cold; but, if mild, no fires would be required for a week or two. The temperature at first should be about 45 degrees, to rise the third or fourth [week?] to from 55 to 60 degrees, and gradually to be raised to 65 or 70 degrees fire-heat, and, with sun-heat, to 75 or 80 degrees, giving plenty of air in fine weather, and syringing mornings and evenings. During the first six or seven weeks, water is only to be given in such quantities as to keep the soil moderately moist; but, as the fruit increases in size, and the foliage is fully developed, water is to be given more freely. When the fruit is about half grown, water is given freely, and liquid manure once or twice a week. The essayist considered it most important, when the young shoots have obtained the length of ten or twelve inches, to press the point between the finger and thumb, without letting the nails come in contact with the bark, till the soft succulent substance is felt to yield to the pressure. Such branches will, in consequence, cease subsequently to elongate, and the sap, being depressed, is expended where it is more wanted. A fruit ripens at the base of each leaf; and, during the period of ripening, one, or more, of the lateral buds shoot, and is subsequently subjected to the same treatment, with the same results. When the shoots are allowed to extend freely to their natural length, a small part of them only become productive, either in the same or in the ensuing season. He had made several experiments to obtain fruit in the following spring from other parts of such branches without success; but he found that, by bending such branches, as far as could be done without breaking them, they were rendered fruitful; twelve figs having ripened perfectly in one season upon a branch of this kind within the space of fourteen inches. In training, the ends of the shoots to be bent downwards as much as possible. The fig tree is distinguished from most, if not all other trees, by the extraordinary property that it bears, and brings forth, two crops every year, each crop being produced upon a distinct set of shoots. During the growth of the second crop of fruit, the tree produces a second shoot, which, when perfectly ripened, contains in embryo, through the winter, the crop for the following spring. As the first crop of fruit approached maturity, he advised the watering over head to be

discontinued, and an abundance of air to be given. When the first crop is gathered, watering over head is again resumed, and continued until the second crop is ripening; it is then discontinued. The winter management is merely to keep the borders moderately dry, and prevent the frost from entering. He was opposed to the plan of growing figs under vines, as the fig, being a native of Asia and Barbary, required all the light we can give it in our climate; and, on this account, it ought to have a house entirely devoted to it.—He recommended a few plants to be grown in pots, which could be forced before the fig-house; this would considerably prolong the succession of fruit. The same routine answered admirably. If bottom heat could be given to the plants in pots, it would benefit them. Mr. Scott would use dung with the soil, as the fig was a very gross feeder, and required it; he would also give the border a good watering of liquid manure at starting, and would not syringe, as it stopped the pores of the leaves. Mr. Saul agreed with the essayist in not using any dung along with the turves; he was of opinion that, if much dung was used, the shoots would not be properly ripened, and, as a natural consequence, there would be no fruit; and differed from Mr. Scott in watering the border, at the commencement, with liquid manure; it was not needed until the leaves were fully developed, which was about the time recommended by the essayist; he also agreed in syringing, and thought it would not stop the stomates of the leaves, as apprehended by Mr. Scott; but would wash off any dust that might settle on the leaves.—Mr. Mason, Mr. Hood, Mr. Barker, Mr. Watson, Mr. Daniels, and Mr. Headman, coincided with Mr. Slow and Mr. Saul on the points raised by Mr. Scott.—Mr. Patterson agreed with Mr. Scott.—Mr. Hood was opposed to pruning the fig. Mr. Saul said that, as the leaves required light to perform their functions, and as the fig-house, if once full of wood, must, every season after, get more and more crowded, unless the trees were pruned, if left to go on in this manner, they would suffer ten times more than they could under any pruning. He would, therefore, prune when the branches, in any way, encroached upon one another.—Mr. Patterson took Mr. Hood's view of the matter; and Messrs. Steadman, Watson, Mason, Baker, and Daniels, coincided in Mr. Saul's view.

A very interesting discussion took place on these different points."

We would only add, that, under our bright sun and almost cloudless sky, the objection made by Mr. Slow is of little consequence here, though, in England, it may be important to secure all the light and sun possible. But figs may be cultivated here with good success in a house with vines, as Mr. Allen and ourselves have proved.

ART. III. *Descriptions and Engravings of Select Varieties of Apples.* By the EDITOR.

XVI. WALPOLE.

IN our volume for 1846, (XII. p. 475,) under our *Pomological Notices*, we gave a brief account of this new apple.

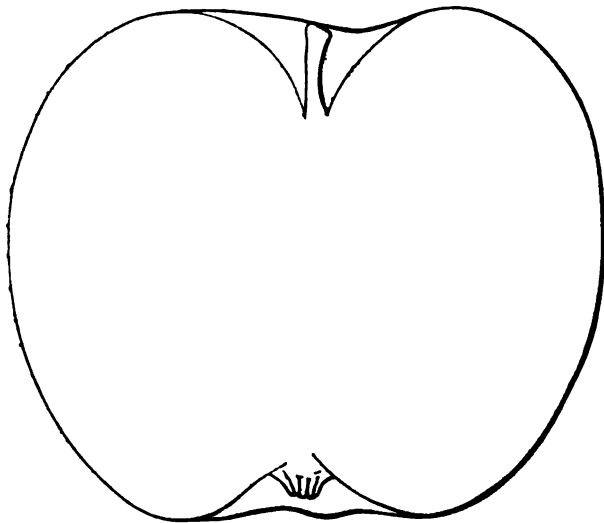


Fig. 25. Walpole.

Since then, we have had an opportunity to judge more fully of its qualities, and, as an early fall apple, it is well worthy of cultivation.

The Walpole, (*fig. 25*,) was first introduced to notice by Mr. E. M. Richards, of Dedham, whose collection of apples is very extensive, and through whose exertions other valuable varieties have been previously brought to notice,—the Benoni being one of the number. It originated in the town of Walpole, Mass. It is a productive apple, with a handsome red skin, and comes in at a good season, between the Williams and Porter.

Size, large, about three inches broad, and two and a half inches deep: *Form*, roundish, little flattened at each end, tapering slightly towards the eye, and little ribbed: *Skin*, fair, smooth, with a yellow ground, nearly or quite covered with bright red stripes, deepest on the sunny side, the surface dotted with scattered yellowish specks: *Stem*, short, about half an inch in length, slender, and rather deeply inserted in a large, round, open cavity: *Eye*, medium size, closed, and very little depressed in a slightly ridged hollow: *Flesh*, yellowish, little tinged with pink, fine and tender: *Juice*, abundant, brisk, subacid, and good: *Core*, rather large, open: *Seeds*, large, broad. Ripe the last part of August, and beginning of September.

XVII. PECK'S PLEASANT. *New American Orchardist.*

In Rhode Island, where, it is supposed, this fine apple (*fig. 26*,) originated, it has a high reputation, and always commands the highest price in the market. It is of good size, with a golden yellow skin, and, in flavor, resembles the Newtown pippin, but, unlike that variety, it has a flesh as tender as the Baldwin. The tree is a productive and regular bearer, and the fruit keeps well. In Rhode Island, and some parts of Connecticut, it is considerably disseminated, and it deserves to be in every good collection in New England.

Size, large, about three inches broad, and two and a half deep: *Form*, roundish, regular, flattened at the base, narrowing a little towards the crown: *Skin*, fair, smooth, glossy, pale yellow in the shade, broadly marked with bright blush in the sun, and covered with numerous prominent grayish russet specks: *Stem*, short, about half an inch long, rather stout, knobby, flattened, and deeply inserted in a somewhat

open cavity: *Eye*, large, open, and moderately depressed in a very broad, open, somewhat furrowed hollow; segments of the calyx very short: *Flesh*, yellowish, fine, crisp, and ten-

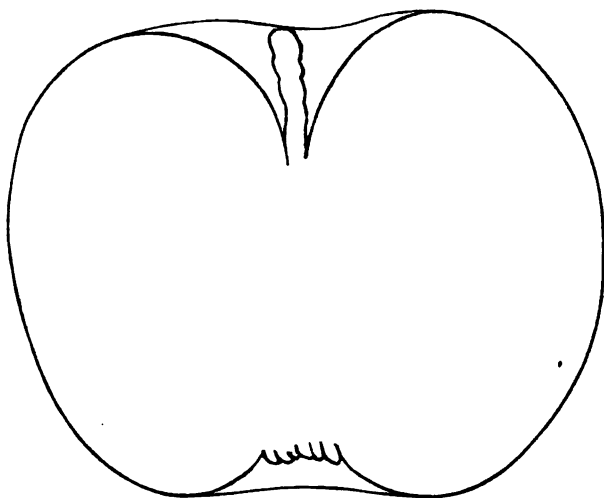


Fig. 26. Peck's Pleasant.

der: *Juice*, plentiful, pleasantly acid, sprightly, with a rich, high flavor: *Core*, medium size, close: *Seeds*, small. Ripe from November to March.

XVIII. BEAUTY OF KENT. Hort. Soc. *Catalogue*, 3d. Ed. 1842.

Among the few English apples which maintain a place—or deserve to—in American orchards, the Beauty of Kent holds the very highest rank. In size, scarcely equalled—in color rich and brilliant—and, though not quite up to the mark of a first quality fruit, it possesses a tender flesh, a pleasant, refreshing, subacid juice, and, valued for the table and kitchen together, it has few equals of its season. We have seen specimens sixteen inches in circumference.

The Beauty of Kent, (*fig. 27*), is a variety which has been cultivated many years, and Lindley, in his description of it, states that, though not distinguished by “any peculiar richness of flavor, it certainly must be reckoned a very

excellent fruit." The tree is a strong and upright grower, and a good bearer.

Size, very large, about three and a half inches broad, and three and a quarter deep: *Form*, roundish, nearly flat at the base, tapering to the crown, which is little contracted, and unevenly formed or ribbed: *Skin*, fair, smooth, pale greenish yellow, with large and distinct stripes of pale red and dark crimson, sometimes slightly russeted at the base: *Stem*, very short, scarcely half an inch in length, slender, and deeply inserted in a

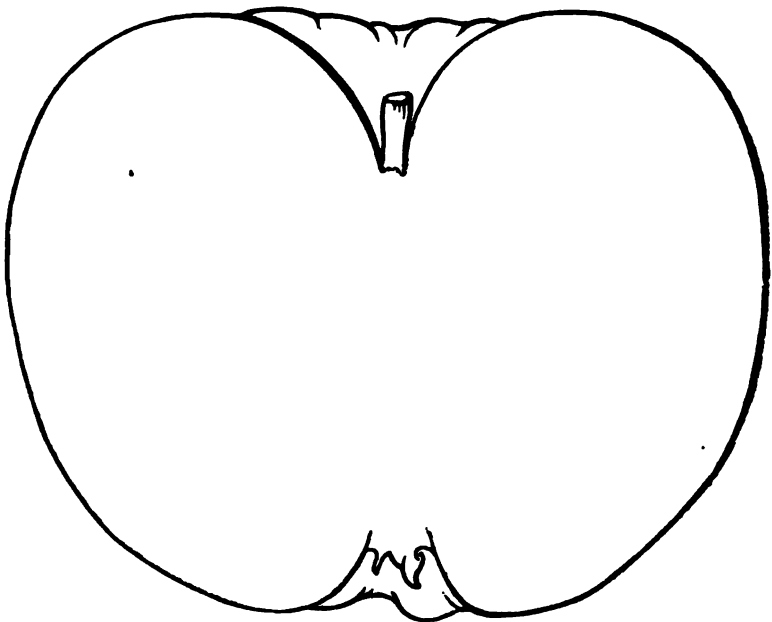


Fig. 21. Beauty of Kent.

slightly angular and deep cavity: *Eye*, medium size, open, and sunk in a rather small, much ribbed, and moderately deep hollow: *Flesh*, fine, white, little firm, crisp, and tender: *Juice*, plentiful, pleasantly acid, brisk, and excellent: *Core*, large, open: *Seeds*, small, roundish. Ripe in September, and keeps till December.

ART. IV. *Memoranda respecting the Cannon Hall Muscat Grapes.* By ALEXANDER WILSON. *With Remarks upon the same.* By the EDITOR.

THE Cannon Hall Muscat, is, without doubt, one of the most magnificent, as well as the most delicious, grapes ever produced, and to raise it in fine condition is a great desideratum with every cultivator. As yet, it is extremely rare in American collections, and, as will be seen by the annexed notice of it, though first produced in England more than *twenty-five years ago*, it is far from being commonly cultivated there. Undoubtedly, the cause has been a want of a knowledge of its management, for, under our own care, we have found it one of the most difficult varieties to bring forward—that is, with reference to young vines. The cause has been,—which we only found by experience, that best of teachers,—that which the writer alludes to, viz., *damping off* of the young wood from too early exposure, before it was mature. When once the vine is fully grown, its treatment is as simple as other grapes, except as regards the setting of the fruit. On this point, there seems to be a want of information, and it is with pleasure that we present the views of an eminent gardener as to the most successful mode of accomplishing this. Every lover of beautiful grapes should read it carefully; for it is equally applicable to the other large kinds of muscats, such as the Portugal, Tottenham Park, Alexandrian, Escholata, &c. The article is from the *Journal* of the London Horticultural Society, (Vol. III. Part I.) :—

It is nearly a quarter of a century since the Cannon Hall Muscat Grape was sent from here to the Horticultural Society, and considering that it is one of the best and largest grapes grown in this country, is it not rather strange that so few are found who give it that attention which it deserves? It is said to be a bad grower, and that it is difficult to get the fruit to set. This is partly true; none of the Muscats set their fruit so freely as some of the other sorts under ordinary treatment: place them in a situation natural to them, and they will be found to bear fruit as freely as the Black Ham-burgh.

In propagating this variety, I take the ripest shoots, and cut the eye or bud out with as little wood as possible, inserting them in pots of sandy loam; they are then plunged in a good bottom heat, and encouraged in their

growth as much as possible during the early part of the season, so that the wood may be perfectly ripened by the middle of September. As soon as the leaves drop, they should be cut back to within two feet of the ground, when they may be planted, if the border is made in the inside of the house, taking care that no part of the stem is buried in the soil; but if the border is on the outside, they should be grown another season in pots, so that the wood may be two years old before it is exposed to the weather, for I find that one year old wood is apt to damp off at the surface of the soil. In making the border, take care that it is not made too rich. Loam, leaf mould, and bones laid on a dry bed, are all that is necessary.

I have tried to force the Cannon Hall at almost all seasons of the year; but we have always had the best crops when we did not begin before the middle of January. They may be forced earlier, but the crop will be small. Beginning with a very gentle heat at first, keeping the house as moist as possible, and gradually raising the temperature as the growth of the vines advances, so as to have the night heat, when the vines are in blossom, at 75°; and during the day 100° is not too much, if they have a little air. The vines, if healthy, will show three or four bunches on every shoot: cut them all off but one, and stop the shoots three leaves above the bunch, nipping off with the finger and thumb any shoots that make their appearance at the axils of the leaves; the bunches are large, and at the end formed like the flower of a cock's-comb, with a stem nearly as thick as the branch from which they grow, and the flowers are so thickly set on them that they have not room to expand. With a pair of sharp-pointed scissors we cut off all the little clusters of flowers in the inside of the bunch, and thin the others as soon as they separate from one another, which is generally three or four days before they open, taking care to make them thin enough; in doing this the bunch should never be touched by the hand, and a little practice will convince any one it is unnecessary.

As soon as the Grapes are fairly set they should be well thinned out, and a steady moist atmosphere kept up in the house until they are ripe. They should never be syringed, as water thrown upon the berries makes them turn black upon the sides and fall off, and this will also be the case with them if the borders at any time get too wet, more especially during the time the fruit is stoning.

Last year I selected three good plants of Cannon Hall Muscat, and plunged them in three different pits in which we grow melons; one of the pits was filled with tan, the second with good oak leaves, and the third with half rotten leaves, which had been previously used in a pine pit. These pits are heated by two hot-water pipes, which run along the front, and the air from the outside can be made to pass over them; the atmosphere in the pits was kept as nearly as possible the same, but the bottom heat was very different. The tan soon heated to between 80 and 90 degrees; the fresh leaves never got above 80 degrees; and the rotten leaves had scarcely any heat in them at all; they might be said to be neither hot nor cold until the vine began to grow, and the heat in the pits increased, when a little heat could be perceived in them about the time the vines were in blossom. All

the plants grew vigorously, and one bunch was left on each plant. They were treated as I have already stated as to thinning and temperature, and I do not think there was one blossom which did not set, and when they ripened there was not one bad berry upon one of them. Those which had most bottom heat ripened the first, but the last were the finest fruit; if, therefore, the border of a vinery can be heated a little, and that heat increased as the vines advance in their growth, success will be sure. And does not this account for the eminent success of Mr. Murray, of Polmaise? His vines are planted in the inside of the house; and as the temperature of the house is increased, so must that of the soil, from the air being necessarily hotter which passes through the drains to the furnace, and on its way giving out heat to the border. In such a house the Cannon Hall Muscat may be as easily grown as the Black Hamburgh in ordinary vineries.

ART. V. *Bayne's Extra Early, Boston Pine, and Hovey's Seedling Strawberry.* By Dr. J. H. BAYNE, Alexandria, Va.

I have had strawberries from my Extra early variety in the Washington market just three weeks ago this day. The Boston Pine and Hovey's Seedling were both pulled from under precisely the same circumstances ten days later. For the first, I obtained \$1 50, and \$2 per quart, and this was repeated three successive market days. This variety requires a south exposure, and a light gravelly soil. It is certainly the earliest variety I have ever been able to procure, and I assure you I have spared no pains or expense in endeavoring to obtain the earliest, as it is quite a desideratum here with us. Many persons have entirely failed, even in this climate, with my early. On flat, rich, and adhesive soils, it is not worth cultivating; but, on a congenial soil, it is most valuable and profitable with me. It is a pretty good bearer, and the fruit attains a medium size. I find it also a good fructifier for the Hovey's Seedling when planted in its proximity. I think the plan of mixing the staminate and pistillate plants is entirely unnecessary, as I can prove by ocular demonstration. It is only necessary for them to approach each other in the same patch. I have beds of Hovey's Seedling in profuse bearing, the remote parts of which are not nearer than 150 feet of any staminate plant.

The Boston Pine in some situations with me this season

is bearing most abundantly, and, where they have sufficient room, they are literally covered with trusses of magnificent fruit. Some plants, I have no hesitation in saying, will yield a pint of fruit each.

My crop of Hovey's Seedling surpasses any thing I ever had any conception of. I can now pick from three to four hundred quarts per day, and my patches are comparatively small. The demand here is limited, and will not justify a very extensive cultivation.

I have now been cultivating the strawberry for twenty years, and have spent some hundreds of dollars in procuring all the finest varieties as they were announced. I have now come to the conclusion that some four or five are all that are necessary for any purpose. I have thrown out at least fifty varieties which have been extolled in their day. Hovey's Seedling I consider incomparably superior to any and all others I have ever tried, or ever expect to try. It combines every essential to render it desirable. It is fine in flavor, magnificent in size, of beautiful color, and extraordinarily productive. It is the very *ne plus ultra* of all the varieties of this delicious fruit. In haste, with great respect, yours, &c.

Alexandria, Va., May, 1848.

Some Remarks on Bayne's Extra Early, and other strawberries, will be found in another page, written previously to the above; it gives us the greatest pleasure to publish a communication from Dr. Bayne, who has probably given more attention to this fruit than any amateur cultivator in the country, and has himself raised several strawberries. His opinion stands in bold contrast with that expressed by the Committee of the Cincinnati Horticultural Society.—*Ed.*

ART. VI. *Floricultural and Botanical Notices of New and Beautiful Plants figured in Foreign Periodicals; with Descriptions of those recently introduced to, or originated in, American Gardens.*

Beautiful Calceolarias.—DEAR SIR,—I take the liberty of sending a few blooms of my seedling calceolarias, for your

inspection, although they are only part of what I should have had but for the unexpected loss of several plants. The seed I received from Mr. Kinghorn, whom I lately lived with, and was saved from his prize varieties of 1847. These, according to the London standard, are a few of the best that have yet flowered. Nos. 1, 2, 3, 4, 5, and 6, I sent to our exhibition last week, and nothing ever shown attracted more admiration. No. 1, was pronounced a perfect gem by all who saw it; there were but six blooms expanded, whereas, shortly, there will be one hundred and more: the plant is in a *ten*-inch pot, and measures fifteen inches over: the flower-stems, nine in number, are only one foot high, and so robust that no stakes are required.—*Respectfully yours, John Mackie, Gardener to Wm. Bostwick, Esq., New Haven, Conn., May, 1848.*

The flowers came to hand, and in very good order, although the labels were misplaced; but the whole of them, taken collectively, were by far the finest we have ever seen. No. 1, is, indeed, a real gem; the spotting being distinct, deep, and rich. Mr. Kinghorn is well known as one of the most successful cultivators of the calceolaria around London, and his flowers have been awarded numerous prizes. We have seen many plants produced from imported seeds, but none which have equalled those of Mr. Mackie. Our correspondent may feel gratified in the possession of such splendid flowers, and, by care in saving the seed, a superior stock may be generally introduced to our collections.

New Seedling Camellia.—Mr. S. Feast, of Baltimore, has recently bloomed a very superb seedling camellia. In form, the flower appears as perfect as the double white, and every petal is as distinctly and deeply striped as the finest carnation. The ground color is pale blush, and the stripes are of a deep red, broad, and showy, giving the flower a striking appearance. It is a great acquisition.

63. PLUMBAGO LARPEÑTE *Lindl.* Lady Larpen's Plumbago. (*Plumbaginidceæ.*) Shanghai.

A greenhouse climber; growing six feet high; with violet flowers; appearing in autumn; increased by cuttings; cultivated in rich loamy soil. *Flore des Serres*, 1848, pl. 307.

This plumbago is one of the richest of recent acquisitions to our showy garden plants. It was found by Mr. Fortune,

near Shanghai, growing on the ruined ramparts, but the Horticultural Society did not succeed in raising it, and its introduction is owing to Sir Geo Larpent, who sent it home in the ship *Monarch*, with the accompanying note, dated May, 1846. "No. 6, Mr. Fortune tried to get a plant of, but failed; yours is, therefore, the only one in England. It is very rare, even at Shanghai, and I found it on the City Wall, growing out of the stone trap. It will therefore require good drainage. This is one of the most ornamental plants I have seen in China. The climate of Shanghai, though in 30° n. lat., is very cold and very hot. I have seen the thermometer in February at 13° and 110° in August. The first specimen exhibited by Mr. Eyles, Sir Geo. Larpent's gardener, only had three flowers; but, *bedded* out, in the nursery of Messrs. Knight and Perry, one plant produced *four thousand* blooms in the month of October. The flowers are borne in terminal, as well as axillary clusters, and so profuse as to cover the branches. They are of an intense violet, with a little red in the throat. It is a splendid plant, and will undoubtedly prove very valuable in our gardens, where our hot autumn sun will show it in all the beauty of its native clime. Every fine autumnal blooming plant is a desideratum. (*Flore des Serres*, Jan.)

64. PÆO'NIA TENUIFOLIA flore pleno. Double Fine-leaved Pæonia. (*Ranunculaceæ*.) Garden Hybrid.

The common single Pæonia tenuifolia is a well known and much admired species in all collections, where its finely divided foliage contrasts so prettily with the other kinds. The present subject is a perfectly double variety of that species; as large and as fine as the old double red, and of a deeper and richer tint. It was originated by some of the Belgian or French gardeners, and deserves a prominent place in every collection. As we write, a magnificent flower is now open on a small but healthy plant, in our collection, which we purchased in Paris in the fall of 1844. (*Flore des Serres*, Jan.)

65. CHÆNÉ'STHES LANCEOLA'TA Miers Narrow-leaved Chænesthes. (*Solanaceæ*.) South America.

A greenhouse plant; growing four feet high; with purplish blue flowers; appearing in summer, increased by cuttings; cultivated in peat, loam, and sand. *Flore des Serres*, 1848. pl. 309.

66. HÒYA CINNAMOMIFÓLIA *Hook.* Cinnamon-leaved Hoya.
(*Asclepiadaceæ.*) Java.

A stove plant; growing four feet high; with greenish yellow and pale purple flowers; increased by cuttings; cultivated in heath soil and leaf mould. *Flore des Serres*, 1848, pl. 130.

67. GLOXINIA FYFIANA. Mr. Fyfe's Gloxinia. (*Gesnerid-
ceæ.*) Garden Hybrid.

A stove plant; growing one foot high; with white and violet flowers. *Flore des Serres*, 1848, pl. 311.

A very beautiful hybrid gloxinia, with large, upright flowers, of a delicate white, and a deep bold colored throat; the peduncles are very long, and the whole character of the plant is peculiar and elegant. It was obtained from seed by Mr. Fyfe, but the varieties which produced so singular a hybrid are not known. It is of easy cultivation, and is one of the finest hybrids yet raised. (*Flore des Serres*, Jan.)

68. MACLEA'NA CORDA'TA *Hook.* Heart-leaved Macleania.
(*Vacciniðceæ.*) South America.

A greenhouse plant; growing three feet high; with orange-colored flowers; appearing in spring; increased by cuttings; cultivated in heath soil, leaf mould, and sand. *Flore des Serres*, 1848, pl. 312.

69. SOLA'NDRA LÆ'VIS *Hook.* Smooth Solandra. (*Solanðceæ.*)

A greenhouse plant; growing two feet high; with white flowers; appearing in spring; increased by cuttings; cultivated in loam, leaf mould, and sand. *Flore des Serres*, 1848, pl. 313.

Solandra grandiflora is a well known ornament of our greenhouses, where its very large, yellowish, trumpet-shaped flowers, ten inches long, are among the showiest of its season. *S. lævis* is somewhat similar, but the flowers, though about as long, are not quite so large and open: they are of a greenish white. In habit, it is similar to the *S. grandiflora*, and its treatment is the same. (*Flore des Serres*, Feb.)

70. CEROPÆ'GIA CUMINGA'NA *Decaisne* Mr. Cumings's Cero-
pægia. (*Asclepiadðceæ.*) Java.

A stove climber; growing six feet high; with chocolate and white flowers; appearing in spring; increased by cuttings; grown in heath soil, leaf mould, and sand. *Flore des Serres*, 1848, pl. 315.

A most beautiful stove climber.

REVIEWS.

ART. I. *Transactions of the Essex Agricultural Society for the Year 1847.* Pamphlet, 8vo. pp. 134. Danvers, 1847.

THE Essex Agricultural Society is one of the most flourishing in the state : its exhibitions are of the most interesting description, particularly in the Horticultural Department, and its annual Transactions contain many interesting reports and valuable essays, which cannot fail to be of the greatest value to every intelligent cultivator.

The Transactions for the Year 1847 have been before us some time, but we have not been able to find room for all the extracts we had marked. Five Essays, upon the Onion, Apple, Pear, Cranberry, and Oak, occupy a large portion of it, and, saving that that upon the pear is a mere compilation and not the result of experience, are of such merit that the Society voted a premium of *ten dollars* each.

The Essay upon the Onion, by J. W. Proctor, Esq., President of the Society, is one of the most complete papers we have ever read, and, as the Committee on Essays remark, is an "ideal model" of what such essays should be. We should be glad, if we had room, to copy all Mr. Proctor's Essay, but we only have space for three of the subjects into which it is divided, viz. :—

1. As to the preparation of the land.

Differing from most other crops, the onion grows well, on the same land, for an indefinite number of years. Instances of continued appropriation of the same pieces of land to the growing of onions, for *ten, fifteen, twenty, and even thirty years*, have come to our knowledge. It is the opinion of many that the crop is better, after the land has been thus used a few years, than at first. Whether this arises from any influence of the crop upon the soil, or is the effect of continued dressing of manures, we have no means of determining. This is certain, that the qualities of the soil necessary for the production of good crops are not exhausted by continued cultivation.

Rarely, if ever, have we known the onion sowed upon the turf when first turned over. It is usual to subdue and pulverize the soil, by the cultivation of corn, or some other crop. Not unfrequently the first year with corn, the second with carrots, and afterwards with onions. It is important, before the seed is sown, that the surface be mellow, finely pulverized, and clear of stones or other impediments, to the free and unobstructed use of the

machine for this purpose. The finer and more uniformly mellow the surface is made, the better. Shallow ploughing, say from four to six inches deep, is usually practised. Once ploughing only in the spring, and frequent harrowings, are practised. Before the ploughing, the dressing is usually spread upon the surface of the field, so as to be covered, or intermixed in the furrow. The mingling and subdivision of it is effected by the use of the harrow.

Whether it would not be advantageous occasionally, to stir the land to the full depth of the soil, is a point on which there is a difference of opinion; most of the cultivators inclining to the use of shallow ploughing only. There are some facts tending to show, that occasional deep stirring of the soil does no harm to the onion crop, but, on the contrary, is decidedly beneficial. As, for instance, onions do better where carrots have grown the year preceding, than after any other crop. The carrot necessarily starts the soil to the depth of ten or twelve inches. Possibly there may be some other influence upon the soil from the plant itself. Our belief is, that the thorough and deep stirring of it, is the principal preparatory benefit.

2. The manure best adapted to promote the growth.

Any strong manure, well rotted and finely subdivided will answer. But the general impression seems to be, that manure from stables, where the horses are freely fed with grain, is the best; and that it should be at least one year old, because it will not be sufficiently rotten in a less time. All agree that the dressing for the land should be kept near the surface, well mixed, and as fine as possible. Though we have seen, the present year, a very superior growth of onions, where green manure from the barn-yard was applied in the spring; but particular pains were taken to subdivide and intermingle it with the soil; and to bush-harrow the land so thoroughly, that very little of the manure was exposed upon the surface.

Muscle-bed is frequently used upon onion land. A portion of this is deemed by some almost indispensable. We have known the continued use for half a dozen years in succession, even without other manures, with a continuation of fair crops; but the general impression is, that it will not do to repeat the application of muscle-bed many years in succession. The effect being to harden the land, and make too much of a crust about the surface. Without question, the effect of the muscle-bed is congenial to the growth of the onion, giving those who live in the vicinity of rivers where it is found a special advantage over those who are remote from it.

Leached ashes are also a valuable manure in the cultivation of the onion; more so when *leached* than before. All kinds of ashes are advantageously applied on onion land.

Compost manure made of meadow mud and droppings from the cattle, we have known advantageously applied on onion fields; but we have many doubts as to this being the best application of this kind of manure. A more lively and quickly operating manure is better for the onion; one that will give them an early start, and advance them as fast as possible, in the first part of the season. The utmost vigilance and activity is used by our cultivators in getting their land ready, at an early period of the season, for

the reception of the seed. It is the first field labor of the spring. The use of compost manure will depend much upon the constituents of the soil with which it is mixed. If the soil be a sandy loam, with a porous subsoil, the compost will do tolerably well; but if it be a black soil, with a clayey subsoil, such as are most of the lands where onions are raised in this vicinity, stable manure, or muscle-bed, or leached ashes, or a mixture of these, will be a better application. The quantity ordinarily applied annually, is from four to five cords to the acre. Whatever is applied, should be generously applied. It will be vain to expect full crops of onions without full manuring. When the manure is collected, it is benefited much by a free application of *elbow grease* in its preparation. The cultivator of the onion must work early and late, and in good earnest. Nothing short of forcible and persevering labor will answer. No man who is afraid of *soiling his hands or the knees of his trousers* will do to engage in this business. Close work at the proper time, is the only sure guarantee of a good crop.—pp. 86-88.

Premising that the usual routine is gone through, the last part is:—

6. The time and manner of harvesting.

When the tops begin to wither and fall, then it is usual to start the onions from their bed and throw them together in rows, say eight or ten growing rows into one. After they have lain thus about one week, they are stirred and turned with a rake, and, in about one week more, when the ground is dry, and the weather fair, they are gathered up by cart loads and taken to the barn. Here they are sorted and cleared of refuse leaves, and then they are in a condition to be *bunched* or *barreled*.

It should be remarked, that a large part of the labor of *weeding, gathering, and sorting*, the onion, can be performed by children from *ten to sixteen* years of age. Boys of this age, when properly instructed, will do about as much as men. They are more nimble, and can come at the work with greater facility. The sorting of the onion is frequently done by girls as well as by boys. From *three to five* dollars a week, at one cent a basket, are usually earned by them during the period of harvesting—which includes the months of September and October. After the crop is taken off, if the surface is sloping, it is useful to plough furrows about one rod apart, to keep the surface from washing. Unless this is done, all the herbage being gone, much of the soil will be likely to be misplaced, by the melting of snows and running of water in the spring.

The inquiry arises, whether the growth of the onion is limited to soils of particular character, or whether it can be cultivated upon any good soil, with proper attention. We know that there is a popular impression, that there are but few places in which the onion can be cultivated advantageously. So far as our own observation has extended, this impression is in a great measure erroneous. Like every other plant, the onion grows best on very good soils, in very good condition. But we have known very fair crops, on plain, light land, after the same was well saturated with *manure*,

muscle-bed, or *ashes*. A good substratum must be laid before a good crop can be expected; and this being done, a crop may be expected on almost any soil that will support other vegetables.

If we were asked, what course is best to be pursued with land on which onions have never been raised, to bring it into a condition for successful cultivation of the crop; we should say, begin by ploughing to the full depth of the nutritive soil, and during the first and second years, thoroughly subdue and mellow the soil by the cultivation of crops of corn and carrots, with liberal dressings of manure; then thoroughly incorporate with the soil a dressing of strong manure, and *muscle-bed*, just covering this dressing; then harrow the surface thoroughly, and clear it of all roots, weeds, or other obstructions; then apply a coating of lively, well rotted manure to the surface and bush-harrow it; and then it will be in a condition to receive the seed, which is to be inserted as soon as the opening of the spring will admit of its being done.

We are aware that we make the raising of the onion dependent upon severe labor and vigilant attention. We know that it cannot be successfully done without these. But it is not labor lost. No cultivation, within our observation, better repays for the labor and incidental expenses. We have known, the present season, acres that have yielded their owners a net income of more than *two hundred dollars*; and we know that a man, with two boys, can well attend to half a dozen acres of such cultivation. Surely, when, as at present, there is no limit to the demand for the article, and a ready cash market, those who have *acres*, and are willing to labor, need not be in want of a fair compensation for their labor.

As samples of the present year's produce in the town of Danvers, we state the following that have come under our notice:—

Names.	Acres.	Produce.
John Peaslee,	3	1980 bushels.
Daniel Osborn & Son,	1 1-5	870 "
James P. King,	1½	660 "
Aaron C. Proctor,	1½	600 "
E. & D. Buxton,	6½	2750 "
Henry Bushby,	4	3000 "
Joseph Bushby,	3	1500 "

Yielding an average of more than 500 bushels to the acre.

In the Essay on the Pear, the writer states what others have done without giving but few ideas of his own. In his directions for growing pears from seed, we have the following advice:—

The seed bed for pears should be in a rich soil, which should be trenched to the depth of fourteen to eighteen inches, and the subsoil well mixed with rich compost. The seed should be sown in the autumn, in wide drills from two to three feet apart, to allow the passage of the cultivator

between them. The next summer, the young trees should be thinned out, so that they shall not stand nearer than two to three inches to each other.

Contrast this theory with the *practical* advice of Mr. Proctor, who states that no man "who is afraid of *soiling his hands, or the knees of his trousers,*" should engage in the business of raising onions. We would apply the same advice to those who would raise pear stocks; and we should much sooner expect to get a good crop of onions by sowing them so as to run a cultivator (!) between the rows, than a good crop of pear seedlings: such advice only leads to disappointment and the loss of the crop. If there is any plant which needs thorough tillage, it is the pear in its seedling state. The spade, the hoe, the rake, and the fingers, are the only implements to be made use of.

In the choice of stocks for the pear, the writer repeats the old story that "the quince is short-lived, not usually bearing more than ten or twelve years." Experience would not have authorized any such statement, as it is well known that the quince will grow and bear abundantly for half a century or more: a row of trees in the garden of the London Horticultural Society, which we saw in full bearing in 1844, had been planted *twenty-five* years.

Every year, the same story goes the rounds of the papers, set in motion by those who know nothing about the subject from personal knowledge. Essays of this kind should seek to dispel prejudice and error rather than disseminate it.

Mr. Ives's Essay on the Apple details the entire management of the trees in a plain and practical manner. Sowing the Seed—Budding—Preparation of the Land—Planting—and the General Routine of Orchard Culture—are given under distinct heads: but we have only room for the concluding remarks:—

Keeping Apples.—As regards the best method of keeping winter apples, opinions are various. In Europe, they usually spread their fruit after gathering it, on a floor to sweat, previous to their final packing, which is then placed in sand, sawdust, chaff, charcoal dust, or peat earth. In this country, we find the practice of our most experienced growers is to gather the fruit by hand, and immediately place them in tight flour-barrels, shaking them gently while packing, and then head them up tight; they are then placed in a cool, shady exposure, under a shed exposed to the air, there to

remain until it becomes cold, freezing weather, when they are transferred to a cool and dry cellar, placing the barrels *on their sides*, and keeping the cellar dark.

As a source of income, we believe that the apple can now be relied upon either for our own markets, or for exportation ; the facilities of communication by steamboats and railroads opening new markets for this wholesome fruit, while the prices obtained for the finest sorts have not diminished but advanced, should incite our farmers to plant out orchards of the apple. Mr. Pell, of Esopus, on the Hudson river, who has an orchard of two thousand, bearing Newtown Pippen apples, gathered from the trees, in one season, seventeen hundred barrels of fruit, part of which were sold in New York for four, and others in London for nine, dollars per barrel.

In making a selection of apples, we should, as far as is practicable, endeavor to fix upon those which are found to suit our soil ; we have heretofore remarked that many kinds which are good bearers when grown in strong and moist soils,—for example, the Pickman Pippen, Williams's Favorite, Blue Pearmain, Roxbury Russet, and Ribstone Pippen,—are the reverse of this upon our own soil, which is of a light, sandy loam ; while the Baldwin, Hubbardston Nonsuch, Yellow Bell-flower, Danvers Winter Sweet, Minister, and Fall Harvey, grow and bear well upon our grounds. The Baldwin and Hubbardston Nonsuch seem to be at home in almost every variety of soils.

In a Report which was made to this society some years since, we remarked that apples, originating on any given soil, will be generally better than most of those which are introduced into it ; citing the Newtown Pippen, and Pennock's Red Winter, which are first rate at the south where they originated, but, when fruited in this locality, are found inferior to the Hubbardston Nonsuch, Baldwin, and some others. A close observer at the West, (Rev. Mr. Beecher,) has recently observed "that the soil and climate so modify the flavor and other qualities of the apple, that there is reason for believing that an apple originating on any given soil will be better than many which are introduced into it, for, though the apple is raised in almost every soil, yet it is probable that each variety affects a particular one ; thus I perceive the most popular apples of New England are natives ; this, to a considerable extent, is true of the West."

Among the best varieties of apples in Massachusetts are the "Minister," and the "Mother;" they are of recent origin, the first-named was raised in Rowley, and is a winter fruit, combining great beauty, productiveness, large size, fine flavor, and late keeping properties. The other is a late fall apple of highest order ; it originated in Bolton, and is a large oblong red fruit of excellent flavor, and a good bearer. No better evidence can be given of the congeniality of the soil of our state for the apple than the natural production of such fruit as the Baldwin, Minister, Hubbardston Nonsuch, Mother, Roxbury Russet, Danvers Winter Sweet, Aunt Hannah, and the Ben of Reading.—pp. 124-126.

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Cultivation of Grape Vines.—Complaints are frequently made of the loss, or partial loss, of a crop of grapes when there could be no apparent cause. Often the vines which appear strong push weakly, and show only one bunch of fruit, and that of small size. Deep planting and a deep border are too often the cause of all the bad effects experienced, and a correspondent of the *Gardeners' Journal*, having failed to procure a good crop, requested information, to which the following is a reply : as it is the best of advice, we copy it here.—*Ed.*

As 'J. W. R.' (p. 117,) wishes for advice from some of your correspondents concerning the failure of his vines, I venture a few remarks. As he has not said any thing about the border, I am led to conjecture that the roots must be lying too deep, and out of the influence of the sun—this being the primary cause of all the ills the vine is heir to. My advice is to get some vine eyes put in immediately, which he can get from those that have been grown out of doors against walls, as those in-doors are breaking. Then, if the vines should fail this year, lose no time in cutting them down ; train one rod to each rafter, which will allow ample room to grow the vines in pots to fill the house next year, independent of the others. If they should require to be cut down, he had better examine his border, and see what state the roots are in ; and, if they are deep, I would at once remove the old soil, at least two feet deep, and get in some good turfy loam, rather light than otherwise, and make it up again : if some of the smaller roots can be brought up, so much the better. See that there is a good drain, sufficiently deep to carry off all superfluous water, as every other effect would be useless (particularly if the border is on a level with the original surface,) if that be not well attended to. If the stems are outside of the house, and there is room to raise the border at least a foot, there will be no need to take more than a foot of the old soil away, as that would allow of two feet of fresh. If 'J. W. R.' thinks proper to try this plan, I do not think he will have cause to regret ; as I have been so situated myself, and I can testify to the good effects produced by so treating them. I have a small vinery, 36 feet long by 10 feet wide, which served me in the way complained of—two years producing nothing but blind bunches. I grew eighteen vines in pots, on Mr. Wright's system, and some of them showed as many as thirty bunches. I intend to take this year two hundred bunches, ten bunches from each of the rafters, and six from each pot, the plants in which are trained between the rafters ; they are now beginning to come into flower, and promise well. There is a pit in the house which I have made into a border, where the pots are plunged three or four inches, which will materially assist them in swelling off their fruit. I find any sort of grape will do for pots. I have four sorts, and all are equally fruitful. By this system I may say I am taking two crops of grapes without distressing

the vines ; some of the bunches from the border vines bid fair for 2lbs. weight each.”—(*Gard. Journ.*, 1848, p. 213.)

Wash for Peach Trees.—Seeing, in your excellent journal, a receipt for a wash for peach trees, by Mr. Tillery, I beg to say I have tried many mixtures, some of them similar to Mr. Tillery's, but I found none of them so effectual as the following simple application—which has never failed, either as applied by myself, or by many others :—If the trees are subject to curl or mildew, I syringe with water as soon as the fruit are set, and then dust them over with road dust, taking care to apply it to the underside of the leaves as much as possible. It is allowed to remain until washed off by rain. Two of these dressings are generally sufficient for the season. The trees may probably look unsightly after the application, but they will thrive and grow luxuriantly, which will amply repay for their appearance. I am convinced, by actual practice, that, when applied to thorn-quicks attacked by mildew, it proves an effectual remedy, and will be a great boon to nurserymen if once they resort to the use of it. A few years ago, I had charge of a garden in the immediate vicinity of Dublin, in rather a confined situation ; and was dreadfully annoyed with caterpillars and green-fly upon the gooseberry bushes. I had tried almost every nostrum I could think of unsuccessfully, and then resorted to the above remedy, and succeeded in destroying, by two dressings, both pests. In this case, if the trees are carefully watched, and the lower extremities of the bush—where the young brood of caterpillars first make their appearance—well dressed, it will preserve the upper part of the tree clean. Some gardeners have been so exasperated with them as to completely plaster the trees all over. A few remarks of mine on the same subject were printed in the Dublin Gardener's Mutual Instruction Society's Transactions some years ago, and many of its members have proved the value of the application ; though, I can assure you that some gardeners would not listen to what they were pleased to call “such nonsense,” until, by some means or other, it wrought upon their iron bigotry, and satisfied them of their folly. I think Mr. Hodgins, of the Kingstown Nursery, Dublin, could testify to its usefulness.—(*Ib.* p. 213.)

Double Flowering Stocks.—There are few plants more generally cultivated than the double stock gilliflower. Time out of mind, the Old Brompton, or Queen, has been the pride of the cottager's garden ; whilst the ten-week, with its varieties of German and Prussian, combining every hue from pure white to deep crimson, now lend their effectual aid in the decoration, combining variety and fragrance in an extraordinary degree. Raising double flowers has always been considered a matter of chance ; but should the following hint by M. Louis Mullott, of Elbœuf, be acted upon, and found correct, (and we have no occasion to doubt it,) it will confer a boon on the small cultivator, who has neither the inclination nor the space to grow single flowers. We give the following translation of this discovery from *La Revue Horticole*, a French work. M. Mullott commences by observing that, for a long period, there has been great diversity of opinion as to the best method of procuring double stock gilliflowers, and that, formerly,

various preparatory means were pointed out, more or less absurd, from which no satisfactory results either were, or could be, obtained. This, then, he says, "is a very easy way, not of making the stocks bear double flowers, but to know those seeds which would be most likely to produce plants accomplishing so desirable a result; thus having the opportunity of sowing only those seeds which have this tendency. Having tried this plan, I communicate it with the greatest confidence, not only with the persuasion that it is a new idea to many florists, but that it will be found useful." The selection of these seeds consists in choosing only those pods which are attached to the flower-stem at the same height, that is to say, opposite each other, or in whorls of three or four. The seeds which these opposing pods contain will produce plants bearing double flowers, whilst those placed alternately on the flower-stem, one above the other, in the natural way, generally contain those which will bring single flowers. He concludes by inviting those who grow stocks to make the experiment, so that they may be convinced of its correctness, and to publish the results of their observations. Many of our readers will, no doubt, exclaim, "Well, this is singular enough!" If it cause them to think—to ask "Why?" our point will, in some measure, be gained. But we shall be much happier to have the "Because," from some of them. But, at all events, we will give our answer; having asked "Why is it so?" We think it arises from an accumulation of sap at that particular part of the flower stem. If vegetable or floral monstrosities (and all double flowers whose stamens are turned into petals are monstrous) arise from an excess of sap, then it appears from the seed-pods being produced on the flower-stem in greater number than usual, and out of the common way, that the functions of the plant have been, in some way, perverted, and this excess of nutriment may be imparted to the embryo seed, and there preserved till brought into action when sown; its result being a double flower. Now we do not mean to say that our theory is right; but we are always glad to receive instruction and information, and thus, in some measure, get repaid for what we occasionally advance. Perhaps some of our readers conversant with the matter will give us something short, plain, and instructive, on the laws which govern the production of double flowers.—(*Ib.*, p. 151.)

Hardy Species of the Pinus Tribe in Scotland.—Just now, while there is an increasing interest taken in the introduction of the finer species of pines, we copy the following account of the *Pinetum* at Ballindalloch Castle, in Scotland, being the substance of a communication read before the Highland Agricultural Society. As the climate of Scotland is more severe than that of England, and as the species which prove hardy there will be likely to prove so in our own climate, cultivators will be able to form some opinion of the relative hardiness of the different species which are enumerated, and, in planting, select only those which have been successfully raised in Scotland.—*Ed.*

"Earl of Roseberry in the chair. Among other interesting matters brought before the meeting, was an account of the *pinetum* at Ballindalloch Castle, communicated by Sir J. Macpherson Grant, and accompanied

by a tabular statement of the age, growth, and condition of the different species. This report was introduced to the meeting by Professor Balfour, who, before reading it, made some observations on the structure of Coniferæ, as regards their woody tissue, leaves, cones, and male catkins, fertilization, and germination; and illustrated his remarks by a series of magnified drawings by the microscope, as well as by specimens of living plants and cones. There are only three British species of cone-bearing plants—the common Scotch fir, yew, and juniper; all the rest now in cultivation in the open air have been introduced from different countries of Europe, from Mexico and other parts of North America, from Chili, the Himalayas, Japan, China, &c. The fact was mentioned of some species producing cones, but no perfect seeds. It would appear that trees, when young, sometimes bear cones without producing male catkins; the formation of pollen seeming to require that the trees should be in a fully developed state. These remarks were illustrated by specimens of the cones of *Abies Douglasii*, in which all the ovules were abortive, the tree not having borne male flowers. The divisions of the natural order were then noticed, and Endlicher's work on the Coniferæ was recommended. Attention was chiefly directed to the section *Abietinæ*, including genera in which the scales were two-seeded, and those in which the scales were one-seeded. Under the former subdivision are found—*Pinus*, with leaves in twos, threes, fours, and fives, and a thickened apex of scales; *Abies*, leaves solitary, (*i. e.*, coming off singly,) flat, no thickened apex of scales, which are deciduous, (*i. e.*, fall off clearly;) *Picea*, leaves solitary, four-cornered, no thickened apex of scales, which are persistent, (*i. e.*, remain long attached;) *Larix* (Larch) and *Cedrus* (Cedar,) scales without thickened apex, clustered leaves, which, in the former, are annual, in the latter permanent. The Professor stated that Ballindalloch Castle stands about 470 feet above the level of the sea, in a sheltered situation, favorable for the growth of all kinds of trees. The pinetum was commenced in 1831. The soil—a loam, one to three feet deep, incumbent on gravel—was trenched, levelled, and planted with common Scotch fir, as nurses for the rarer trees which have since been, from time to time, added to the collection. The cultivation of these having been attended with varied results, Sir John had communicated to the Society the report before the meeting, with the view of adding to the information at present possessed with regard to the kinds of foreign Coniferæ most suitable for the climate of this country. The Professor called the attention of the meeting more particularly to the statements in the report in reference to the following trees:—*Pinus excelsa*, planted in 1836, several of which were making rapid progress, dead, cause unknown; *Uncinatis*, 1836, hardy, handsome, eleven feet high; *Pyrenaica*, 1836, twelve feet high, hardy, and handsome; *Banksiana*, 1836, seven and a half feet high, stunted, unsatisfactory, but quite hardy; *Inops*, 1832, six feet, quite unsuited to climate; *Halepensis* and *Pinea*, both repeatedly tried, always destroyed by frost; *Cembra*, 1832, sixteen feet, handsome, succeeds on the hills wherever tried; *Ponderosa*, 1832, thirteen feet, uninjured by frost, but subject to the attack of a beetle which enters the young shoot

and eats the pith; *Serotina*, seven and a half feet, sickly and unpromising; *Abies Douglasii*, 1832, sixteen and a half feet, most vigorous and handsome tree, has this year produced cones; *Morinda*, 1832, has failed; *Canadensis*, 1832, five feet, mere shrubs, unadapted to climate; *Menziesii*, 1836, eight feet, hardy and ornamental; *Picea cephalonica*, three feet, numerous specimens, produce of seed from Cephalonia, uninjured by frost; *Pinsapo*, 1840, two feet, apparently hardy and growing well; *Pichta*, 1836, seven feet, handsome and healthy; *Webbiana*, 1836, dead from cold; *Cedrus Deodara*, 1839, three feet, has been slightly protected in winter; *Libani*, many specimens promising well, but not above five feet high.—Professor Balfour stated, as the results of Mr. Macnab's experience, that *Pinus Pineæ* seems to be quite hardy, but does not attain the size of a timber tree in Scotland. *P. halipensis* is too tender for this climate. *P. Sabiniana* appears to be quite hardy. *P. excelsa* has suffered in several places from cold, but thrives well in the Botanic Garden. *Abies Morinda* is perfectly hardy. *A. canadensis* does not grow to the size of a tree here. *Picea Webbiana* always injured by late spring frosts. *Cedrus Deodara* quite hardy. Professor Balfour concluded by stating that a communication on the same subject had been received from Mr. Humphrey Graham. His pinetum, however, was not so far advanced as that at Ballindalloch; and as he understood that that gentleman intended afterwards to make a more detailed statement on the subject, he would not occupy the time of the meeting further than by stating that, between March, 1846, and March, 1847, Mr. Graham had himself sown, and given to others to sow, no less than about 12,000 Himalayan seeds. Many of these were received from Col. Morrison, H. E. I. C. S., by whom above 40,000 seeds were imported from India, and distributed in 1846.—Mr. Lawson was happy to see that the attention of the society was directed to the growth of coniferous trees, as none were more suited to the climate of this country, whether as regards shelter or timber. He trusted that other gentlemen would follow the example set by the Colonel Morrison and Mr. Graham in the introduction of seeds from foreign countries; and, with that object in view, he would direct the attention of the members to the quarters whence many of the *Coniferæ* have been, and still might be, introduced, such as the Caucasus, from which we have the *Picea Nordmanniana*, Siberia, and the Himalaya Mountains, where the *Cedrus Deodara*, *Pinus excelsa*, and *Abies Morinda*, are found. In Nepal, the *Abies Brunoniana* could be procured; he considered it to be a great acquisition, and well adapted to the climate of this country. Several rare and valuable *Coniferæ* have been obtained from California, such as the *Abies Douglassii* and *A. Menziesii*, &c. That quarter, together with the northern part of Texas, and, indeed, northwest America generally, were well worth stricter investigation than had hitherto been bestowed upon them. There was every reason to believe that very valuable *Coniferæ* might be obtained from the northern provinces of China and the empire of Japan. One of the latest introductions—the *Cryptomeria japonica*—was a useful tree, and promised to be suitable to this country. The mountainous districts of Chili, whence had been obtained the *Araucaria imbricata*,

probably contained pines which might be useful in this country. Mr. James M'Nab informed the meeting that the cones of the *Abies Douglasii*, without seeds, referred to by Professor Balfour, were taken from the pinetum of Mr. Speirs, of Calcreuch, the tree measuring forty-two feet in height by five feet four inches in circumference at the base.—Professor Low, in answer to a question from the chairman, regarding the quality of the wood of the *Cedrus Deodara*, stated that it was highly valued for its durability by the natives of the East.”—(*Gard. Journ.*, 1848, p. 151.)

Culture of Primula Sinensis.—This interesting little plant was introduced in 1820, and, from its gay appearance in the winter and spring, is well deserving of notice. The seed, which is produced abundantly, should be sown, as soon as it is ripe, in pans, filled with equal parts of sandy soil, and leaf mould, and sparingly watered till they germinate. After they have formed two or three rough leaves, transplant them into small pots in equal parts of good loam, rough sandy peat, and rotten dung, with some fine charcoal. Let them be repotted as often as they require it, till they show signs of flower, when, instead of repotting them in the common flower-pot, have some small rustic baskets made as follows :—Take a piece of board of any description, one inch thick, and cut it into any shape or form that fancy may suggest (ours are round, square, and oval ;) then nail some pieces of fir or other rough branches of any tree, split by the saw, up the sides, (or rather to form the sides,) and one round the top to form the rim, to which the uprights are fastened, as well as at bottom ; when finished, put some pieces of charcoal and rough peaty turf in the bottom ; on this place the roots of the plant, and fill up with the same soil as in pot culture. When this is done, fasten a piece of wire, by both ends, to the sides, so as to form a handle ; then suspend them along the front of the greenhouse. The effect is charming, particularly when there is a mixture in the same basket. I also adopt the same plan with all my achimenes, mixing the species together in the same basket, and using the same kind of soil. By this mode of culture, they may be grown finer than in common pots, however well drained they are, or whatever description of soil is employed. When the primulas have done flowering, place them in any convenient shady place, or they may be planted out in the flower-garden beds ; but their flowers will not be so large or brilliant, nor will they answer the purpose of flowering in the autumn and spring months in the greenhouse, when they are most required, particularly in places where pot plants are required in the dwelling-house. If plants of this description are required for planting out in the flower-garden beds, or in rustic or other boxes, January is a good time to sow the seeds, which should be frequently potted, and encouraged as much as possible, so that they may be pretty strong before planting out. For rock or root work, the plant is well adapted, and forms a pleasing contrast with other plants for that purpose. The primrose is easily propagated from cuttings, but seeds are to be preferred.—(*Gard. Journ.*, 1848, p. 229.)

Cannon Hall Muscat Grapes.—I see, by your notices to correspondents, that a valuable secret respecting the setting of the Cannon-hall Muscat grapes is in the possession of somebody in Herts, and that you have, as yet, been unable to publish it. These Hertfordshire folks must be the deuce for secrets, and, what is still more perplexing, they seem determined to keep them. As I have a way that is quite successful in fertilizing the Cannon-hall Muscat, Black Damascus, Stullward's Sweet Water, and other shy setters, it may answer the purpose of your "Original Subscriber" till the grand secret is made public. On the first appearance of the blossoms opening, I draw my hand across the bunches two or three times a day, beginning when the sun has some power in the house; or, if the day is dull, at the dryest part of it. I make my hand quite clean and dry before operating, and repeat the process every day till I see the berries set. I had no difficulty in making Muscat grapes set as thick as the white Frontignan in the beginning of this month by doing as above; and was equally successful last year in the dullest weather. When only a few bunches of Cannon hall Muscats, or Black Damascus, are to be operated upon, and there is time to do it, it is a good plan to thin out the side flowers in the middle of the bunches and shoulders before they come into bloom; it makes what are left stronger, and they can be fertilized with a camel's-hair brush, or drawing a bunch of some free-setting variety across them.—(*Gard. Journ.*, 1848, p. 181.)

Plants for Bedding out on Lawns.—"A. H." begs for information respecting shrubby exotics proper for the open air in the summer months, and my first intention was to furnish a list of those which are generally found in first-rate gardens, giving the color, habits, and size of each. But on after-reflection, I have thought it best to confine my observations strictly to the results of my own experience, as more appropriate to the large class for whose benefit these papers are written. If, as the hand-writing of "A. H." intimates, the applicant is a lady, I am sure I shall best consult her wishes by being explicit, and recommending a course of summer gardening easily managed. Many exotics will do well only in very warm seasons; others require much attention to produce effect; but there are many which yield a beautiful display with moderate care. Persons with professional gardeners at hand do not need the advice requested by "A. H.," and the very nature of the application appears to indicate the kind of reply which will be most acceptable.

Let me premise that the beds intended for effect in summer should be unoccupied by herbaceous plants or other productions which do not naturally decay at the close of spring, as the old-fashioned flowers of our gardens do not harmonize well with greenhouse plants; and besides this, each bed should be devoted to one kind of flower. Some borders should be devoted to miscellaneous plants and shrubs, but a summer garden should be free at the proper time of bedding out exotics. My own plan is to fill beds on the lawn with bulbs in autumn, and these being past their beauty in May, the plants intended for summer are put in, and, by the time they are ready to flower, the bulbs can be removed; or, their foliage having withered, they

may be raked over and allowed to remain till another season. By confining each bed to one kind of plant, a better effect is produced, and it is more easy to attend to the cultivation. However, the circumstances of gardens are very various, and, if your beds are partly occupied with fixtures, you must exercise your taste, and introduce exotics here and there, so as to harmonize best with the whole, and produce the best effect.

In my opinion, at the head of the class of plants now under consideration, stands the Scarlet geranium, or, more properly, pelargonium. Nothing can exceed the beauty of this in the open air, and nothing yields its flowers more abundantly, or demands less attention. There are many varieties now grown, thirteen being named in a list advertised in the Chronicle of the 22d inst. These differ in height, intensity of color, and character of foliage. By placing a strong plant, of a robust, tall habit, in the centre of a small bed, surrounding it with a number of less stately growth, and forming the border of those of a dwarf development, a pyramidal bed is produced, the lustre and charming beauty of which are unsurpassed. Single plants may be introduced in vacant spaces, either trained upright to a stake, or, if of a dwarf kind, made to form a mass on the ground.

Next in durability and abundance of bloom, come the shrubby, yellow calceolarias, contrasting so vividly with the scarlet pelargoniums. These grow rapidly, and should be planted about one foot apart every way, so as to cover the bed. The herbaceous kinds look well, but are more delicate than the shrubby varieties. The large flowers of the superior seedlings, now grown, are only fit for days continuously warm and still; wind and rain soon rob them of their beauty. Fuchsias deserve commendation on every account. They are graceful in their mode of growth, profuse bloomers, and continue gay till the frosts of autumn set in. These are so various in their heights, and in their colors, that they admit of the most charming combinations. Fuchsias have also the recommendation of living through the winter in open ground, if properly protected. From a bed occupied with hyacinths and tulips, fuchsias may protrude without interfering with them.

The variegated pelargoniums look magnificent in a bed, if varieties are selected for the purpose. They should be carefully trained in pots, and stopped from flowering, until a good compact head is secured; they will then bloom beautifully in a warm summer. Cinerarias admit of tasteful arrangement, and make handsome beds. I presume it is not necessary to say any thing of verbenas and petunias, as they are found everywhere. Small round or oval beds, surrounded with an ornamental edging of basket-work, either of wood or wire, are attractive objects when overflowing with verbenas or petunias. Phloxes, antirrhinums, mesembryanthemums, &c., form beds of various and durable beauty. The Phlox Drummondii is a great favorite with me, and it continues in bloom as late as any thing of a tender kind in the open air. I have mentioned the above because I know how easily and successfully they may be cultivated, what beauty they are capable of producing, and what satisfaction the amateur will derive from a garden supplied with them. They may be all cheaply purchased.—(*Gard. Chron.*, 1848, pp. 284-285.)

Treatment of Plants in Pots.—Most persons who patronize horticulture have plants in pots, which, having escaped all the mischances of winter, are now beginning to put on their new foliage, and to prepare for the development of bloom. Even the meanest cottages have often floral pots, which, after being covered with dust in the dreary season, are now exposed on rainy days as the spring advances. The experienced amateur has been training his exotics for months past, whether he has a greenhouse, or is contented with a frame and a parlor window, and they are now in good order, and making rapidly their new growth. But there are many devoted lovers of flowers who are not experienced amateurs, and their little stock of plants in pots now engages their attention for the first time. What had we better do with them? is now asked, as *Pelargoniums*, *Fuchsias*, &c., are brought out on a sunny day. This question we shall endeavor to answer, so that the least practical hand may not be misled.

Repotting is demanded by at least two important principles in the economy of vegetation—the dependence of the plant on the state of the root, and the quality of the soil. Turn out one of your last year's *Pelargoniums*, and you will find the pot so full of roots that you will wonder what has become of the bulk of mould they have displaced. These roots have evidently been seeking after more house-room, for they have wandered round and round the pot in curious spiral forms, until at last no place remains for their lively wanderings, and they grow wearied with the search, remain motionless, and stiffen in their texture. In this state, no healthy growth of the plant can take place, and the first thing to be done is to cut away large portions of the old roots, leaving only those which are youngest, in greater or less quantities, according to the size of the head they are to sustain. When this is carefully done, and the plant has been in its new circumstances for a few days, fresh spongioles or little roots will push forth, and a corresponding healthy growth of the foliage be developed. It must be observed that this treatment will not answer if the plants have made much progress. The autumn is the proper time for root-pruning, and the plants should be cut down in proportion as the roots are cut away. But all deciduous plants, such as *Fuchsias*, which are just now pushing forth leaves, may be treated thus with advantage.

Repotting is demanded further by the deterioration of the soil. In the open ground plants are supplied with proper nutriment by the application of manure, and, their roots being unconfined, they can stray where they please in search of food; but in a pot these conditions are not fulfilled. A little soil only can be given, and however rich it may be in fertilizing qualities, they are soon filtered away by artificial watering. Then, again, soil should be porous and open for a healthy vegetation to be secured; and therefore, although liquid manure might supply the losses of the soil, it would not serve to keep it light and open. The next thing, therefore, to be done, after the roots are reduced in size, is to repot them into an appropriate soil. What that is, depends, of course, upon the nature and natural circumstances of the plant; but, for general use, any rich mould which allows water to permeate freely will answer the purpose. If, when you

have repotted your plant, you find the pot feels as heavy as lead—that water applied to the surface stops there, and only gradually disappears—you may be sure your labor has been thrown away; for no plant will remain healthy in such a mass of clay. On the other hand, if the mould feels elastic when pressed down, and water applied runs rapidly through it, your work may be considered properly done. What is called good garden mould, with about one-third its bulk in rotten leaves, and one-third of coarse sand, will make a compost adapted to general purposes.

Many gardeners mistake the requirements of plants by seeking for what they call fine mould; and some sift it, to secure this fancied advantage. Coarse lumps, and even stones, will be of use rather than otherwise in keeping the drainage clear. Every pot should also have about two inches of broken crockery put into the bottom of it. For the same reason, water should always be supplied in very small quantities. As much as will moisten, without running through, should, if possible, be given, since every portion beyond that washes the soil of its best properties.—*Gardeners' Chronicle*, 1848, p. 268.

Sarawak, (Java,)—Its Soil, Climate, &c.—Mr. Low describes the soil of Sarawak as a strong, rich, yellow loam, covered, to a depth of from six inches to a foot, with black and very productive vegetable mould. The sugar-cane attains great perfection without the slightest cultivation. Nutmeg, planted for experiment, grew remarkably well, as also did the cinnamon and clove. The cabbage palm is the most esteemed vegetable produced in the island. The yet unopened fronds of a strong growing fern, a species of *Marattia*, when boiled, form an excellent vegetable, much preferred by European residents. The shoots of the bamboo are also an esteemed vegetable, and, in the hands of the Europeans, make a most excellent pickle. Among the other more useful vegetable productions, Mr. Low mentions the cocoa nut, sago palm, gomuti palm, betel, rice, &c. Of vegetable productions collected for exportation, there are, Barus camphor, the produce of *Dryobalanops camphora*, which grows to a very large size. Vegetable tallow, or vegetable wax, a fatty oil obtained by the compression of the nuts of some species of *Dipterocarpus*; the species most valued attains the height of forty feet; the fruit is as large as a walnut, and yields a large proportion of oil, which, in England, has proved far to surpass olive oil for lubricating steam machinery. There are several other oil-producing plants. The seeds of the niato, or gutta percha, produce edible oil of a fine quality. The substance gutta percha, is more properly gutta suban—the percha being an inferior article; the tree is found in all the forests of the peninsula of Malacca, of Borneo, Singapore, and the adjacent islands. Jintawan is a substance similar in all respects to caoutchouc, and is the produce of a climbing plant of the genus *Urceola*, the thick, soft bark of which, on being cut, emits the sap in the greatest abundance, and without destroying the tree; there are three kinds in Borneo; the fruit is one of the most grateful of the country to the European palate. The celebrated Upas tree, *Antiaris toxicaria*, is found on the island, but not common: the poisonous sap flows freely from the bark when tapped.

Dammar, the resinous gum of many kinds of trees, quite different from *Damara australis*, is an article of considerable trade. The kulit lawang of commerce is the aromatic bark of a wild species of cinnamon, and is produced in abundance. Cotton of excellent quality has been produced on the island, and its cultivation will probably hereafter become important. Pepper is exported in large quantities: this aromatic is not used by the natives of the countries which produce it. Coffee thrives well. Tobacco is grown in small quantities. The *Theobroma Cacao* proves to be prolific in the island. Ginger grows well in the gardens, and turmeric is found wild in abundance. Many valuable hard woods are produced in the magnificent forests, but the trees are little known; the hardest and most durable is called balean, and is almost incorruptible. There are in the island upwards of sixty species of trees which produce excellent timber. Ebony is abundant in many parts of the island. Several scented woods are known to exist. The flowers of Borneo are not less grateful and beautiful than the forests are grand and majestic. The most striking mentioned by Mr. Low, are, the species of *Cœlogyne*, called "flowers of mercy," all highly fragrant, and exceedingly beautiful; several *Vandas*, of which a fine one has been named *V. Lowei*; a beautiful *Cypripedium*; *Dendrobiums* are insignificant, but the *Erias* are abundant, and very beautiful; there are many beautiful species of *Ixora* and *Pavetta*; four beautiful species of *Clerodendron*, the handsomest of which, with crimson flowers, named after Captain C. D. Bethune, is introduced to England; *Lysionotus Aucklandii*, surpassing any other yet known; *Hoya imperialis*; and a showy species of *Bauhinia*. Perhaps the most gorgeous are the species of *Rhododendron*, which here assume a peculiar form, being found epiphytally on the trunks of trees; the roots, instead of being small and fibrous, as with the species of colder climates, become large and fleshy, winding round the trunks of the forest trees. The most beautiful is the one I have named in compliment to Mr. Brooke, [*Rhododendron Brookeanum*,] the flowers being large, and in large heads, produced throughout the year, and of all shades, from full rich yellow, to a rich, reddish salmon color. The most attractive plants of all are, however, the pitcher plants, eight species of which Mr. Low discovered in the western part of the island. "The largest Bornean one, which I propose to call *Nepenthes Hookeriana*, in honor of Sir W. J. Hooker, the able director of the Botanic Garden at Kew, is found growing in deep and shady jungles, climbing to the tops of the trees. The pitcher is nine inches in length, having a large lid standing on a column which is a continuation of the beautiful edge of the pitcher; that part which is broadest, and turned towards the midrib of the leaf from which it depends, is furnished with two broad wings, which are beautifully ciliated; the broad pitcher—for this, like the *Rafflesians*, produces two kinds—is generally crimson; the long pitcher differs from the other in its trumpet shape and green color, which is spotted with crimson. Six plants of this are now in England.

The fruits of the Indian islands since their first discovery have been held in the highest esteem. Malaya's Nectared *Mangustin* has been, by all

writers, placed at the head of the native lists of fruits, its delicious and delicate flavor having gained it a place, in the estimation of Europeans, over the rich and luscious Durian. In my opinion—though both of these are exceedingly fine,—the Lansat (*Lansium*), when well ripened, has a peculiar aromatic flavor, combined with all the delicacy of the mangustin, which renders its firm, transparent, and jelly-like pulp more agreeable. The mangustin (*Garcinia mangustina*) is as large as a moderate apple—dark purple outside, but, when cut, of a bright crimson, the seeds being embedded in a white, grateful pulp. The durian (*Durio zibethinus*), the strong odor from which disgusts many Europeans, is from nine to twelve inches in length; of this fruit there are many kinds, some without the offensive odor. A species of mangustin “produces the gamboge of commerce, which exudes also in small quantities from the cultivated varieties.” The lansat is one of the finest fruits of the island; it is small, and produced in bunches from the stem and branches of the *Lansium*. Two kinds of bread fruit exist in Borneo. The tampui is an orange-colored fruit, produced on a small sapotaceous tree, with large dark-colored leaves; its pulp is of a sweetish acid; its fermented juice makes an intoxicating liquor, much esteemed by the Dyaks. The rhambut-an (*Nephilium*) is produced in bunches terminally. The varieties of mango (*Mangifera*) are very numerous, but not of fine flavor. Several kinds of jambu (*Eugenia*) are grown, but are not held in high esteem. The climbing (*Averrhoa*), of which there are two kinds, is used in cookery.

There is a sketch of the zoology and mineralogy of Borneo, but the greater part of the volume is occupied with an account of the history, customs, and institutions of the Borneans.—*Low's Sarawak—Its Inhabitants*.

Mushrooms.—We grow here a good many mushrooms on the old system, generally one bed out of doors, another in the shed, about thirty feet long each. Last winter the bed in the shed did not come into bearing at the time I expected. About the beginning of March, I put on a lining of warm manure, about two feet thick, and it remained on for a couple of weeks, when, the bed being warm, it was taken off, and the bed covered with straw hurdles. In three days I found the mushrooms coming, but very sparingly, and they continued to come, but were nothing of a crop. The manure that was taken off was put into a trench for cucumbers, in the month of April, and, by the latter end of May, the mushrooms came up on the ridge quite thick, and continued to do so during the whole of the summer till the month of October, when the ridge was planted with cauliflowers for hand-glasses, and then they sprung up. The leaves of the cucumbers sheltered them from the hot sun. I generally gathered three times a week. To get mushrooms in the hot months of summer, in the open air, is desirable,—(*Guard. Journal*, 1848, p. 230.)

Lachenalias for Spring Flowering.—Those who neglect to grow a number of the available bulbous plants in pots, for the decoration of their green-houses in early spring, forego a great amount of the variety and attractiveness of which they are capable. Foremost in this group of plants (not commonly grown) we should place the *Lachenalias*. The habit of these

plants is very elegant: two or three leaves emerge from the soil, and from the centre of these arises an erect stem, varying in height, in the different kinds which are most worth cultivating, from six inches to a foot; two-thirds of this stem is covered with blossoms, which are tube-like, and hang nearly perpendicular, one above another, all round the stem: remaining a considerable time in perfection, and opening so that nearly the whole spike of flowers is expanded at one time. They are easily grown. About August, the roots, having for some time been in a dry, dormant condition, should be repotted—singly, or two or three in a pot, according to taste—in a compost of turfy peat and loam, well drained; they will soon begin to grow, and must be moderately supplied with water; they may be wintered on a shelf in the greenhouse. About April, and early in May, they will naturally come into bloom, and may be had earlier by accelerating their development in a gentle heat. The species that we should prefer are *Lachenalia pendula*, *tricolor*, and *luteola*, all of which bear yellow blossoms, the latter having, in addition, a touch of green, and the two former a belt-
ing of red.—(*Gard. Journ.*, 1848, p. 184.)

Results of the Successful Cultivation of the Grape.—The vineries are each 40 feet by 18 wide; the borders inside the houses are 12 feet wide, and outside 18 feet; and, as the front walls are built on arches, the vines have a border of 30 feet to luxuriate in. The borders are made as follows: 1 foot 6 inches of brickbats and lime rubbish at the bottom, with cross drains every twelve feet; each is connected with a general drain in front of the border; this drain is 18 inches deeper than the bottom of the border. The soil is a rich loam, (the top soil of a meadow,) mixed with about one-fourth of lime rubbish, a little night-soil, and two horse-loads of rotten manure. The borders are two feet and a half in depth. The vines are planted inside, one house with *Hamburg* grapes, and the other with the different kinds of *Muscats*. Both houses were planted in March, 1846. The principal part of the vines were raised from eyes the January preceding, and the rest were weak vines from eyes in 1845, except three or four that had been forced the year previous; these latter have not done nearly so well as the former. The vines grew finely the first season, making strong wood, short-jointed, and ripened well; they were pruned to about half the length of each rafter. Forcing was commenced in both houses on the 10th of February, 1847. I saw them in August following, and a finer crop, or better fruit, I never witnessed, as far as they were pruned. The bunches were large, the berries well swelled, and all a good color—not one of them being shanked. The greatest number of bunches on one vine was twenty-six, the least number, fourteen. The weight of the bunches was from 1 lb. to 2½ lb. each; the entire weight being nearly three hundred weight from the thirty vines with which the houses were planted. This, your readers will say, was a surprising crop for the second year after planting, and so, no doubt, it was; and now comes a very important question. Was it prudent, on the part of Mr. Gerrie, to allow so many to remain on the first season? and was he justified in so doing? The result showed that he was. The vines did their duty nobly. He was aware that the material in which

they grew was good ; the wood was strong, and well matured ; and he judged, therefore, that he might allow them to produce the above quantity. Yes, but says the critic, what will they do the next year ! Will they not be totally exhausted ! In answer to these questions, I reply that the vines are this season showing well nearly to the top of the house, and are breaking strong down to the bottom of each rafter, and showing fruit at nearly every eye. The Hamburgs were commenced in December last, and are now in a forward state, quite as strong as any one need wish. The Muscats are also now breaking well, and showing abundance of fruit. Many persons that saw them last year prophesied that, this year, they would be a complete failure ; such, however, happily is not the case, and such persons would do well to visit Cooper's Hill, to be perfectly convinced they were mistaken in their judgment. I conceive the great cause of the success is the sound border—not too rich, and well drained, which caused the vines to make wood well matured, and full of fruit-bearing sap. I have dwelt upon this part of my subject somewhat long, but I was anxious to do justice to Mr. Gerrie's good management of the vines.—(*Gard. Journ.*, 1848, p. 182.)

Cultivation of Chinese Azaleas.—Your correspondent, "A New Subscriber," should procure a lot of Azalea phenicea for stocks. Small plants struck late last year, that are now in small 60-sized pots, if shifted into large 60's, and put into a hot frame now, will make most excellent plants to work about the first week in June. I prefer phenicea, for stocks, to any other sort, for I find it will bear more rough treatment without injury than any other, and may be grown as strong as any one can wish. A brisk, moist heat, is necessary, and, if no better provision is made, a common handglass in a hot frame will do exceedingly well to put the plants under as soon as they are grafted. Take young shoots of the current year's growth, about three or four joints long ; if the top of the shoot is used, pinch out the heart. Side-grafting is best, and more readily done ; let the cut be about half an inch long ; do not cut the stock deeper than the scion will fill up ; tie with very soft bass, cotton, or worsted. If very large plants are wanted in very little time, put three or four grafts on a plant. Set them under the handglass as soon as they are done ; after which they only want looking to, to mind they do not flag or get too damp. In two or three weeks, they will begin to grow, when they will require a little air. I never have a failure, and many of my plants flower the following year. The following twelve are the best I am acquainted with :—1. *Formosum*—fiery red, fine shape, thick, firm corolla ; 2. *Perryana*—salmonish pink, fine shape, thick, firm corolla ; 3. *Murrayana*—bright deep rosy carmine, large, good shape, and fair substance ; 4. *Ignescens*—fiery crimson, large, very showy, good substance, shape not first rate ; 5. *Exquisite*—French white, or lilac, tinted with deep pink, bad shape, but so distinct in color as to be generally grown and admired ; 6. *Optima*—fiery deep red, fine shape, thick, firm corolla ; 7. *Grandis*—fine purple, large, good substance, very showy ; 8. *Variegata*—French white and reddish pink, fine shape, thick, firm corolla ; 9. *Gladstonesii*—paper white, striped, and spotted with bright red, fine shape, thick, firm corolla ; 10. *Lateritia*—brick red, fine shape, thick, firm

corolla; 11. *Triumphans*—salmon, fine shape, large, thick, firm corolla; 12. *Sinensis*—rich yellow, good shape and substance. Nos. 1, 2, 3, 5, 8, 9, and 10 should be worked, as they are very apt to go off if on their own roots. The following are twelve other excellent sorts:—1. *Prince Albert*—fiery deep red, wants well growing, or it comes bad in shape; 2. *Double red*—ditto; 3. *Refulgens*—deep rosy fiery crimson; 4. *Speciosissima*—reddish crimson, very large and showy; 5. *Alba perfecta*—paper white; 6. *Præstantissima*—bright light purple; 7. *Rosea superb*; 8. *Coccinea superb*—an improvement on *Smithii coccinea*; 9. *Vivicans*—light purple, large; 10. *Duke of Devonshire*—dark red; 11. *Fulgens superb*; 12. *Blanda*—salmon red.—(*Gard. Journ.*, 1848, p. 197.)

Culture and Management of Greenhouse Specimens.—Mr. G. Mason read an Essay on the General Culture and Management of Greenhouse Specimens. He remarked that, in selecting a collection of plants for specimens, there were two points of the greatest importance to be borne in mind: the first was, contrast of colors; the second was, diversification of foliage. He also recommended novelties worthy of cultivation to be introduced. The beginning of February, if the weather was mild, he considered the best time for the commencement of potting these plants, in consequence of their having made but little growth, and from the less injury they would sustain. The essayist recommended potting progressively the first season, for he considered that, if hard-wooded plants were potted according to the one-shift system, there would not be that certainty of success, as if they were potted according to the progressive system. He also observed that, in the one-shift system, from the large quantity of soil consequently required, the stationary situation it was in, and from frequent waterings, it was quite evident that it would become retentive, and become reduced to a state of compactness, unfavorable to the growth of roots. The essayist did not consider it necessary to enter into detail upon the different soils required for different species, but recommended, as a general rule, to use the compost in as fresh a state as possible, as he considered the chemical properties of soil in a fresh state acted more readily than in that which had undergone decomposition; and also that the mechanical properties were much better. If used as he recommended, he considered there would be no necessity for the introduction of potsherds in the soil, which, in his opinion, were more detrimental than useful. The plants recommended were those propagated the previous summer, and of seedling plants as many as could be obtained. As the plants in general were in small-sized sixty pots, he would shift them into small forty-eights, or larger, according to the size and habits of the plants, giving them a drainage of at least half an inch of potsherds; this he would do by placing a large crock in the bottom, smaller ones on these, and cover the whole with a layer of moss or coarse peat. The house considered best adapted for growing specimen plants was span-roofed, of a south and north aspect, as, in that case, they would receive all the solar light possible to be obtained; and, if placed under more unfavorable circumstances, they could not perform their functions in the decomposition of carbonic acid, or the elaboration of their food. The operation of potting be-

ing completed, the plants should be arranged as near to the glass as possible, and sufficient space allowed between plant and plant for the free circulation of air, and the admission of light. The house to be kept close for two or three weeks, until the plants had begun to make fresh roots, except on bright days, when air should be given in the early part of the day. No artificial heat to be given, except the weather was severe, and, in that case, the temperature not to rise more than from 40 to 45 degrees Fahrenheit. The plants were to be syringed on those mornings when the sun was shining, as it would assist the plants considerably in the commencement of their growth. As the plants advanced in growth, great attention was to be paid to the stopping of the leading shoots, for, if neglected at this period, it would be a task of great difficulty to bring them to their proper form, and at the expense of the plants at a future time. Staking would be requisite to some degree, but should be dispensed with as much as possible, for the number of stakes sometimes used not only have an unsightly appearance, but also a tendency to injure the roots. By the latter end of June, or the beginning of July, the plants were to be again shifted—those in small forty-eights into small thirty-twos, and those in large forty-eights into large thirty-twos, or small twenty-fours, according to the state of the roots. At this season, he recommended syringing, both morning and evening, as it not only assisted considerably the growth of the plants, but also preserved them from the attacks of insects, such as the thrip and red spider. The best method of hardening the plants was by leaving the house open all night, so that the plants might have all the air possible, without being exposed to all the influences of the weather, such as heavy rains, which are injurious to the health and appearance of the plants. During the winter, the greatest attention was to be paid to the watering, particularly in not giving too much. Dryness was also to be guarded against, for, if such plants as *Boronia serrulata*, *Styphelia tubiflora*, &c., were allowed to get too dry, he considered it a task of impossibility to restore them. Air was to be given on mild dry days freely, but the house kept closed on wet and foggy days. The plants to be carefully cleaned, and all damp or decayed leaves removed as soon as possible after their appearance. Stirring up the surface of the soil was essentially necessary for the admission and circulation of air to the roots; also for the equal distribution of water. By the beginning of March, the plants were to be transferred to pots sufficiently large for their growth the ensuing season—twelves or sixteens, according to the size of the plant; these he considered quite large enough in a general collection. Larger might be used in some instances with advantage, but not to any extent, for such large pots were, from their unsightly appearance, decidedly objectionable. In potting the plants, the greatest attention was to be paid to the drainage; he considered two inches sufficient; this was to be prepared in the same manner as recommended for the first shifting. After the plants were potted, all the old stakes were to be taken out, and the plants restaked and tied in the neatest manner possible. They were then to be watered moderately, to settle the soil equally, and to be kept close for a week or a fortnight, after which time

air was to be given, increasing in proportion as the season advanced, and the weather became warmer. Particular attention was to be paid to the tying and stopping of the leading and irregular shoots, so as to keep the plants as compact as possible. No definite plans could be laid down for the training of creepers; trellises of a flat, cylindrical, globular, or balloon shape might all be used with equally good taste, according to the purposes for which they were intended. If this course of treatment were followed, by the end of the second season of their growth they would have attained a size and character worthy of the name of "specimens."—Mr. Patterson preferred using potsherds in the soil; he considered the plants were benefited by them, and that they were required to keep the soil porous and open. Mr. Saul agreed with the essayist, as he considered there would be no occasion for the introduction of potsherds if the soil was used as recommended.—Mr. Scott, Mr. Charles, and Mr. M'Laurin agreed with Mr. Patterson; Mr. Stow, Mr. Walton, Mr. Combes, Mr. Hood, and Mr. Watson coincided with the views of the essayist. A very interesting discussion took place upon the different soils, manures, &c.—(*Gard Journ.*, 1848, pp. 198, 199.)

ART. II. Domestic Notices.

Bayne's Extra Early Strawberry—I have the greatest prospect for strawberries I have ever seen before; shall be able to test a great many varieties this season. Our season is very late, and almost a month later than I have known. Some varieties of the strawberry are nearly ripe with me. But the Extra early variety is nearly one week ahead of all others in the same situation, although with you, or some gentleman near Boston, it proved so late. I think there must have been some mistake. I have Princess Alice Maud, the native Virginia, procured from you; the Boston Pine, and several other natives procured from different localities, but find mine decidedly in advance of all. The fruit on the Boston Pine is not near so large at this time as Hovey's Seedling, although in parallel rows, and both and all on a hot south hill-side. They did not come into bloom by several days as early as Hovey's Seedling. I shall, however, watch them all most anxiously, as it is quite a desideratum to procure the earliest varieties. I have never failed to get \$1 per quart for the first. The Boston Pine is growing with me most luxuriantly in various situations, and promises to produce an abundant crop. I have also several of Prince's Seedlings on trial. The early variety of mine, if cultivated on very rich ground, and a level surface, will prove good for nothing. It seems to delight in a sandy, gravelly soil, and on southern slopes.—*Most respectfully yours, John H. Bayne, Alexandria, Va., May 6, 1848.*

[We have never tried the Extra Early variety raised by our correspondent: for, having seen specimens received for it, which were later than the

Early Virginia, we did not think it an important addition. Probably soil and cultivation were the cause of its lateness. Some strawberries require peculiar treatment to bring out their true character. It may have been that the specimens we saw were not the true kind. The Boston Pine, we can assure Dr. Bayne, is with us *one week* earlier than the Seedling.—*Ed.*]

Aberdeen Beehive Strawberry.—This variety, now under culture by several American growers, is unfortunately a *staminate* variety, and, from this circumstance, but little can be expected from it. If our transatlantic friends will transmit us an estimable pistillate variety, we shall feel in reality under obligations to them, but, until then, we ask them to *favor* us with no more staminate varieties similar to the British Queen, Myatt's Pine, Myatt's Eliza, and such trash. In fact, we have new American varieties superior to any that England can boast.—*W. R. P., May, 1848.*

[This is altogether a premature opinion. Its being staminate is no reason why it is not a most valuable variety. We have already stated, (p. 218,) that we have our doubts of its coming up to the description given of it at the page referred to, but by no means because it is staminate. We have had under our care, and have seen under the cultivation of others, enormous crops of Keen's Seedling—to this day the best strawberry in England—a staminate variety. The tendency of the vines to winter-kill and to burn up in summer is the great objection to that variety, otherwise it would be extensively cultivated. To condemn the Beehive in advance of its fruiting because it is staminate, is perfectly absurd.—*Ed.*]

Strawberry Challenge.—You will perceive, by the Horticulturist, that I have accepted the \$500 challenge offered by Nicholas Longworth, Esq., of Cincinnati, for a productive staminate strawberry. I wish now to invite you and all other amateurs of this favorite fruit, and especially our highly intelligent and esteemed friends, Messrs. Wilder and Walker, to visit my collection when in fruit about the 10th to 15th of June. I will guarantee that all shall feel satisfied that the time has not been misspent. I now announce that there does not exist on the earth a collection of strawberries presenting any comparison to my present one, and those who will inspect it will wonder that they should have been misled by cultivating the trash sent out from Europe with high-sounding names during the last ten years, when such superior varieties can be produced on our own soil. Mr. Longworth and myself are perfectly agreed that every European staminate variety has proven comparatively worthless for American culture, and, with regard to any pretended novelties from Europe, the simple inquiry whether it is staminate or pistillate, will settle the point as to its value or worthlessness. On our own soil, however, we may produce staminate varieties more congenial to our climate, some of which will produce fair crops, and such has been the case with several of our new seedling varieties. Under this head, I would call especial attention to the new seedling varieties of the Monte Video Pine. These are of stronger growth than any other class, the blossoms, in many cases, as large as a dollar, and they form the most splendid family of strawberries as regards size, form, flavor, and color of the fruit that has ever been seen. It is a singular fact that no seedling varieties of

this magnificent species have yet been produced in Europe, and, in fact, the original variety is there comparatively unknown, it being found in but three or four collections in all Europe. We may also refer to the large and beautiful seedling varieties which have been obtained from the Prince Albert, and the Crimson Cone, and which are unequalled by any but the preceding.

During the last autumn and winter, we have been gratified at receiving orders from Europe for our new and superior American varieties, and we predict that, in a few years, every variety hitherto cultivated in England will be cast aside there as utterly worthless in the comparison.—*Yours very respectfully, Wm R. Prince, Linnean Botanic Garden and Nurseries, Flushing, L. I., May, 1848.*

Severity of the Winter at Albany.—We have had a very severe winter for young trees and shrubbery of all kinds, as well as for peach, plum, and cherries; our prospects for fruit of these kinds is meagre indeed; the peach and plum crop will amount to little or nothing—the blossoms having been killed by the extreme vicissitudes of the winter—and the cherries promise but very little better. I have tree after tree without a blossom upon them, while the pear and apple trees are filled with bloom. You are aware that I protected my young pear trees last fall with straw, and I am much pleased that I did so, for I have not lost or had materially injured a single tree out of over a hundred so protected. A few trees removed early in the autumn, before the leaves had fallen, and from which the leaves were cut with a knife, have been killed down to near the ground, but *not* destroyed. I wish to recommend this plan of protecting young and rare varieties of the pear to those who wish to use the wood for scions, for you are aware that the bark of young trees is very often so much injured by the winter's sun as to render the wood unfit for such purpose.—*Yours very truly, Herman Wendell, Academy Park, Albany, N. Y., May, 1848.*

ART. III. *Massachusetts Horticultural Society.*

Saturday, April 29th, 1848.—Exhibited.—FRUIT: From J. F. Allen, fine Black Hamburg grapes.

May 6th.—An adjourned meeting of the Society was held to-day—the President in the chair.

Voted, that the Recording Secretary be requested to distribute through the parcel post the tickets of the members and invited guests.

Mr. Newhall submitted a motion, that “appropriations for the objects of this Society be made at the stated meetings in January, April, July, and October, and at no other meeting:”—agreeably to the wish of the mover, it was laid upon the table, for action at the stated meeting in July.

George W. Warren, Wm. S. Nelson, and J. J. Clarke, were admitted members.

Adjourned four weeks, to 1st Saturday in June.

May 13th.—The first general display of the season took place to-day in the Society's Hall; and we are gratified to state that it was far superior to any exhibition of the *season* ever made; not only were the specimens numerous, and of a varied character, but what to us, at least, was the most important—evincing, as it did, a higher degree of skill,—was the superior growth and beauty of the plants. This, indeed, is the great object of the Society. Novelties will always hold a prominent place in the exhibitions,—but the principal prizes must be given where the skill of the cultivator has been most exerted.

The Pelargoniums surpassed any thing of the kind ever seen, and will form a new era in the cultivation of this exquisite family. The great difference in the *roundness* of the flowers, as well as the *depth and brilliancy* of coloring, between the new and old varieties, can scarcely be believed, without examination. We were glad to find so just an appreciation of Mr. Beck's seedlings, and it justifies our opinion, that fine varieties of plants have only to be exhibited, to immediately find innumerable admirers.

The President of the Society exhibited a variety of plants, among which were a large *Azalea variegata*, three feet in diameter, and *A. exqu岸ita*, tricolor and *decora*, new and handsome; twenty plants of *Ericas*, viz: *E. vestita elegans*, *E. ventricosa alba*, *superba* and *breviflora*, *E. odorata*, and a species without name, very handsome; *Lilium testaceum*, (two plants) *fuchsias*, *cinerarias*, &c., and a great display of Lamarque, Solitaire and other roses.

From Messrs. Hovey & Co., eighteen pelargoniums, embracing the following varieties:—Beck's Centurion, Rosamund, and Grandiflora, Foster's Orion, Drury's Pearl, and Celestial: these six carried off Mr. Beck's *special* prize of £5. Beck's Blanche, Desdemona, Isabella, Rosy circle, and Sergeant, and Celestial: these were awarded the Society's 1st prize in class I. Beck's Mustee, Zanzummin, Gigantic, and Marc Antony, Hovey's Jenny Lind and Celestial: these were awarded the 1st prize in class II.; also a plant of *Campanula nobilis*.

From W. Quant, eighteen pelargoniums of various kinds, [not named,] six *fuchsias*, six *cinerarias*, six *calceolarias*, a splendid specimen of *Ixora coccinea*, and *Araucaria excelsa*, and other plants and cut flowers. From John Cadness, fine plants of *Cryptomeria japonica*, *Clématis azurea grandiflora*, *Azalea variegata*, six *cinerarias*, six *calceolarias*, and other plants, bouquets, cut flowers, &c. From John Quant, six pelargoniums, viz., Matilda, Joan of Arc, Orange Boven, Sylph, Lady Douro and Prince Albert; these obtained Beck's *special* prize of £2; also, a fine specimen of *Lechenaultia formosa*, *Pimelæa spectabile*, *Brugmansia*, *Epiphyllums*, &c.

Plants, cut flowers, bouquets, &c., from Messrs. Breck & Co., T. Needham, R. M. Copeland, E. M. Richards, A. Bowditch, P. Barnes, James Nugent, and others.

FRUIT: From J. F. Allen, fine specimens of Pitmaston white cluster, Early black, Zinfindal, Miller's Burgundy, Black Hamburgh, and Grizzly Frontignan grapes; also figs and lemons. The committee who tasted of the fruits, state that they were of "*fine* flavor, though so early in the season."

VEGETABLES: From John Quant, a brace of handsome cucumbers. From Thomas Needham, Lettuces.

Premiums were awarded as follows:—

PELARGONIUMS. Class I. To Hovey & Co., for the best six dissimilar plants, in 8-inch pots, \$6.

To Wm. Quant, for the second best, \$4.

Class II. To Hovey & Co., for the best six dissimilar plants, \$6.

To Azel Bowditch, for the second best, \$4.

ROSES. No premiums awarded.

FUCHSIAS. To Wm. Quant, for the best six varieties, \$6.

No competition for the second premium.

HEATHS. To John Quant, for the best six, \$2.

VARIOUS SORTS. To Wm. Quant, for the best display, \$6.

To John Quant, for the second best display, \$5.

CINERARIAS. To Wm. Quant, for the best six varieties, \$3.

To John Cadness, for the second best, \$2.

CALCEOLARIAS. To John Cadness, for the best six varieties, \$3.

To Wm. Quant, for the second best, \$2.

CACTI. To Azel Bowditch, for the best six varieties, \$3.

No competition for the second premium.

HYACINTHS. To R. M. Copeland, for the best display, \$5.

To J. Breck & Co., for the second best, \$3.

BOUQUETS. To John Cadness, for the best vase, \$2.

To A. Bowditch, for the best parlor, \$2.

To John Cadness, for the second best, \$1.

CUT FLOWERS. To Thomas Needham, the first premium of \$3.

To Wm. Quant, the second, \$2.

GRATUITIES. To the President of the Society, for a fine display of greenhouse plants, \$8. For a splendid show of roses, \$3.

To Wm. Quant, for a fine plant of *Ixora coccinea*, \$3.

To James Nugent, for a fine show of cut flowers, \$2.

MR. BECK'S SPECIAL PRIZES FOR PELARGONIUMS. To Hovey & Co., for the best six dissimilar plants, in 8-inch pots, \$25.

To John Quant, for the second best, \$10.

May 20th. Exhibited.—**FLOWERS:** From the President of the Society, a variety of flowers, among which were a species of *Carragana*, *Spiræa Drouettii*, (new,) Ghent azaleas, several kinds of lilacs, Tree pæonies, &c.; also, four fine plants of *Erica ventricosa* fragrans, *Azalea Gledstanensis*, and cut flowers of Lamarque and Solitaire roses, a seedling camellia, &c. From N. J. Becar, Brooklyn, N. Y., a collection of flowers of some fine *calceolarias*; also, pelargoniums. From Jos. Breck & Co., choice tulips and cut flowers of various kinds.

From Messrs. Hovey & Co., cut flowers of pelargoniums, among which were Beck's Aurora, Cassandra, Rosamund, Centurion, Desdemona, Isabella, Maro Antony, Hebe's Lip, &c., Lyne's Forget-me-not, and others. From J. Cadness, a pretty specimen of *Calystegia pubescens*, with several flowers; also, tulips, bouquets, &c. From S. Walker, pretty ranuncu-

luses and other flowers. Flowers, plants, bouquets, &c. from A. Bowditch, John Quant, Messrs. Winship, A. Aspinwall, W. Kenrick, James Nugent, O. Everett, J. King, John Kenrick, and others.

Premiums were awarded as follows :—

TULIPS. To John Cadness, for the best thirty dissimilar blooms, \$8.

To Joseph Breck & Co., for the second best, \$6.

To S. Walker, for the third best, \$3.

POT PLANTS. To John Quant, for the best six plants, \$2.

To Azel Bowditch, for the second best, \$1.

PARLOR BOUQUETS. To Messrs. Winship, for the best parlor bouquets, \$2.

To A. Bowditch, for the second best, \$1.

VASE BOUQUETS. To A. Bowditch, for the best vase bouquet, \$2.

To John Cadness, for the second best, \$1.

GRATUITIES. To John Cadness, for a plant of *Calystègia pubescens*, \$3.

To Joseph Breck & Co., for a fine display of tulips, \$3.

To N. J. Becar, Esq., the Society's Silver Medal, for a great variety of beautiful *calceolarias*.

FRUIT: From Wm. Quant, fine specimens of Black Hamburg and Muscat of Alexandria grapes. From J. F. Allen, of Salem, Black Hamburg, Grizzly Frontignan, and seven other sorts of grapes, all well grown.

VEGETABLES: From Wm. Quant, very fine asparagus. From J. Quant, two brace of cucumbers. From John Hill, asparagus and rhubarb, very fine, presented too late for premium.

May 27th. Exhibited.—**FLOWERS:** From the President of the Society, a variety of plants, including *Erica Bowiedna* and *Azalea Gledstanèsi*; also, cut flowers of several Tree peonies, among which was one called *rosea superba*, a magnificent new one, with very deep red flowers, quite distinct, apparently a cross between the common double red and the *Banksia*; with these were Grand Duke de Bade, *Monstræa alba plenissima*, *Rococco*, &c., and other cut flowers. From Jos. Breck & Co., a fine show of herbaceous and Tree peonies. From Messrs. Winship, a variety of cut flowers of shrubs, azaleas, hawthorns, &c.

From Messrs. Hovey & Co., fine pansies, twenty-two varieties of beautiful azaleas, ranunculuses, and six kinds of hawthorns. From J. A. Kenrick, fine clusters of flowers of the *Wistaria sinensis*, and azaleas, hawthorns, &c. From E. S. Rand, Esq., Dedham, a bouquet, composed of indigenous plants. From John Cadness, fine plants of *Rhododendron ponticum*, seedling *calceolarias* and *cinerarias*, *Anigozanthus coccineus*, and cut flowers of Tree peonies, in eight or ten varieties. From A. Aspinwall, a splendid collection of roses. Bouquets, roses, cut flowers, &c. from E. Wight, W. Quant, W. Mellor, W. Kenrick, S. Downer, Jr., P. Barnes, E. M. Richards, James Nugent, A. Bowditch, S. Walker, and others.

Premiums and gratuities were awarded as follows :—

TREE PEONIES. To J. Cadness, for the greatest number of varieties, \$5.

To J. Breck & Co., for the greatest display, \$3.

HARDY AZALEAS. To Hovey & Co., for the best display, \$3.

To Messrs. Winship, for the second best, \$2.

PLANTS IN POTS. To W. Quant, for the best six, \$2.

To John Cadness, for the second best, \$1.

VASE BOUQUETS. To James Nugent, for the best pair, \$2.

To A. Bowditch, for the second best, \$1.

MANTEL BOUQUETS. To W. Quant, for the best pair, \$2.

To Messrs. Winship, for the second best, \$1.

GRATUITIES. To S. Walker, for fine ranunculuses, \$3.

To A. Bowditch, for a display of anemonies, \$3.

VEGETABLES : From J. Quant, a brace of cucumbers. From W. Quant, Victoria rhubarb, two stalks weighing 3 lbs. 8 oz. From A. McLennan, gardener to Mrs. Pratt, Victoria rhubarb, two stalks weighing 3 lbs. 4 oz. From John Cadness, Victoria rhubarb. From Mrs. Spaulding, rhubarb.

HORTICULTURAL MEMORANDA

FOR JUNE.

FRUIT DEPARTMENT.

Grape Vines in the greenhouse or vinery will now require less attention ; if the thinning, shouldering, &c., has been thoroughly done, no other care will be necessary but to attend to the temperature, giving due quantities of water, and taking off the laterals. Air should be given very early, admitting more as the day advances, and closing up early in the afternoon. Damping the floors and walks should be repeated according to the situation of the house ; if quite dry and airy, three times a day ; if not, only once after closing the sashes. Young vines just planted should have the leading shoot carefully tied up, the tendrils all cut away, and the laterals taken off at the first or second joint. Vines in cold houses will now require the same attention directed in our last for the greenhouse. The bunches will be ready for thinning and shouldering the latter part of the month, and this should be done carefully, and without delay. If the borders have not been dug, they should also be finished now.

Strawberry beds will require a final weeding now before the fruit begins to ripen ; straw should also be laid along the rows to keep the fruit off of the ground. New beds may yet be made.

Grafted and budded trees should be carefully looked over, and the buds tied up. Disbud all superfluous shoots.

Pear, apple, and other fruit trees may be summer-pruned now : this is just the time to commence by taking off the tops of the *side* shoots so as to form spurs, but allowing the terminal ones to grow till next month.

Peach trees in pots, now swelling up their fruit, should be liberally watered, using liquid guano.

Insects should still be looked after ; if the aphids are troublesome, syringe with oil soap : early attention to this will prevent much injury to the trees.

FLOWER DEPARTMENT.

Pelargoniums will still be finely in flower if they have been properly managed : during the heat of the day, when the sun is out, they should be

shaded from 11 till 2 o'clock ; and they will remain in beauty much longer. Next month will be the time to head them down.

Gloxinias and *Achimenes* will be prominent objects during the summer, and will add more to the decoration of the greenhouse than any other plants ; a succession should be brought on ; the earliest should be now shifted for the last time ; and the latest should now be potted off. Be careful to use only light heath soil.

Dahlias should be planted out before the 25th, if a good bloom is expected ; later than that, they will not do well unless the plants are quite large and strong.

Hydrangea japonica should now be shifted into large pots, if not done before.

Anemone japonica should now be potted into 10-inch pots, in which they are to bloom.

Scarlet Geraniums, now turned out into the border, will make a fine show all summer.

Camellias should now be all removed to the open air, if not already done, unless there is no opportunity to do so : in that case, the glass should be entirely coated with whiting to break the rays of the sun. But they do best if they can be placed in the open air. The last of this month is a good time to repot the plants. Plants inarched early may now be detached from the old stock, and placed in a warm shady place for a few days. Cuttings may be put in as soon as the wood is ripe. Syringe often, and water freely at the root.

Veronica speciosa should be removed to the open air ; the change of temperature is sure to throw it into flower.

Ericas may now be turned out of the pots into the open ground, selecting a light soil, and an open airy situation.

Japan Lilies will be in bloom the last of the month : keep them liberally watered.

Carnations and *Picotees* will require attention : carefully tie up the flower-stems as they advance.

Azaleas (Chinese) of all kinds may be potted this month, and then plunged in the ground in a dry situation : grafting may be done now.

Verbenas should now be turned out into the open border.

Roses may be now propagated from cuttings ; plants in pots should now be turned out into the ground, where they will make a fine growth before autumn.

Fuchsias will now require another shift, if large specimens are wanted. Let the soil be light and rich for the final potting.

Chinese Primroses.—Seedlings potted off last month will now need a shift into the second-size pots : keep in a cool, half-shady place.

Euphorbia jacquiniæflora should now be repotted.

Calla aethiopica may now be dried off gradually and the pots turned on their sides until September.

Plunge all kinds of plants in tan or earth to keep them from drying up.

THE MAGAZINE OF HORTICULTURE.

JULY, 1848.

ORIGINAL COMMUNICATIONS.

ART. I. *Notes on Gardens and Nurseries in the Vicinity of New York, Philadelphia, Baltimore, and Washington.*
By the EDITOR.

(Concluded from page 244.)

Philadelphia, March 17th, 1848.—An increasing taste for plants and flowers has caused the establishment of several new gardens and nurseries since our visit in 1845. And while these new gardens have furnished a good supply, the older ones, with one exception, have greatly increased their facilities for extending their business, and have made many additions by the importation of new plants. At another opportunity, we trust we may have more leisure to give some account of the gardens of these new aspirants for a portion of the favors of amateurs and lovers of plants.

Exotic Nursery of R. Buist.—Several additions have been made to this establishment, and we found, that, since 1845, the old flower-garden, fronting Eleventh Street had given way to a low, lean-to roofed camellia house, adapted for bringing forward young stock; it faces the north, and is about sixty feet long, and fifteen wide. The whole stage and front shelf was filled with plants—including seedlings—from one to three feet high. From this, we passed into the old camellia house, stocked with larger plants, several of which were yet in bloom, though the high season had passed. Among the number, we noticed Halley's Monarch, of considerable reputation, but showing no signs of excellence, the

color a common red ; Queen Victoria, (Fielder's,) also highly recommended, is but an indifferent flower,—red, with a veining of white, having the appearance—from the indistinctness of the latter color—of being a faded flower.

In the Propagating House, we found a good stock of plants coming on, and, among the novelties here, two seedling azaleas ; one very similar to *Gledstanèsii*, with scarcely as much red in the petals, and more regularly distributed ; it will be a good acquisition. The other seedling was a white, of the habit of *variegata*.

Passing to the long range of glass on the other side of the garden, divided into many compartments, we noticed Mr. Buist had a good stock of Tom Thumb geranium, as also another new and fine, the Brighton Hero. *Azalea Williamsii* was here in flower, brilliant from the fine violet purple tinge in the petals, but of a straggling habit, and indifferent foliage, which will prevent its being a very popular variety. Mr. Buist must try to produce the same tint on a plant having the habit of the *variegata*. The azalea is susceptible of great improvement, both in the foliage and flowers : the former may be much broader and richer, or more delicate and less deciduous, than some of the varieties ; and the flowers may be brought to a better and rounder outline. A few years since, it was thought the pelargonium could never be made a *round* flower ; but, by patience and perseverance, Mr. Beck has attained this great object, and, if acquired in one tribe, it can be in another. Mr. Mackenzie, whose place we shall notice, has, in this respect, achieved wonders. *Centradènia rosea*, a plant of no great beauty, was blooming profusely ; *Brugmànsia Knightii*, with its double trumpet-shaped flowers, was in fine bloom. A quantity of seedling amaryllises, all from the same seed-pod, were quite different, and all exceedingly pretty : somewhat in the way of *vittata*, but better. *Acàcia spectàbilis*, *nitida*, and some other species, were making fine specimens for another season : out of flower or in flower, they are always objects of beauty. One end of this range was filled with a lot of seedling and worked camellias ; among the latter, *C. Alexina*, but so much like *americana*, that few could detect the difference. A new seedling of immense size, but ordinary in other re-

spects, was just in bloom. The usual stock of popular plants occupied the other compartments. Mr. Buist has now connected with his nursery a seed store in Chestnut Street, where he is prosecuting a thriving business.

Garden of P. Mackenzie.—The new camellia house, which had but just been completed at the time of our last visit, was now stocked with one of the finest collections of plants we have seen, embracing some superb specimens of candidissima, tricolor, Lówii, Donckelaërii, double white, &c. Mr. Mackenzie made a tour in England in 1844, and purchased many fine specimens, but, under his judicious management, they have been greatly improved in size, form, health, and beauty. Some of the double whites were one mass of foliage from the pot up. Mr. Mackenzie has also been fortunate in being the possessor of the fine collection of camellias made by the late Mr. Campbell, who bequeathed the whole of them, valued at fifteen hundred dollars, to Mr. Mackenzie.

One house was completely crammed with azaleas, from seedlings three inches high to very large plants. We have just stated that Mr. Mackenzie has done a great deal towards attaining a perfect form in the azalea, and we do not doubt that, in the quantity of seedlings coming on, he will be enabled to add some exquisite varieties to our collections. *A. Remingtonii* is a superb flower; but *A. Mackenziedna* the originator thinks the best of his seedlings. The plants were not yet in bloom.

Among the things which struck our fancy, were two species of acacia, *A. pulchélla* and *A. floribúnda*; the latter dwarf and compact in habit, with linear leaves, the branches wreathed with its yellow blossoms. Most of the acacias form great tall straggling plants before they bloom, and are, therefore, illy adapted to amateur collections where there is only a small greenhouse: but *A. floribúnda* is not one of them; for many of the plants, not three feet high, were one mass of flowers: so with *A. pulchélla*, which has pinnate foliage. Another fine object was *Gesnéra oblóna*, a plant of free growth, and spikes of tubular scarlet flowers. The roses were blooming finely, and the whole collection we found in the very best order.

Landreth and Fulton's Nurseries.—This old establishment, we found, was about to come under the hammer, as the part-

nership was about to be dissolved, and the premises leased, Mr. Fulton intending to establish himself in the business near by, and Mr. Landreth confining his labors to the raising of seeds, which he has so long and successfully been engaged in. Since our visit, the whole of the plants have been sold.

In the collection, were some superb specimens of *Camellia* var. *Landrethii*, which was produced here, and, in all, there were some ten thousand camellias, including stocks, offered for sale. We believe we understood Mr. Fulton to state, that the culture of the camellia would be one of the principal objects, as soon as he established himself in his new place.

Brooklyn, N. Y., March 21st. Residence of Mr. Becar, Henry Street.—To the real lover of plants, it is a source of the highest gratification to visit Mr. Becar's collection at this season of the year. Entirely unlike all other places, where plants are crowded together as if the object was—as it too often is—to hide the plants, every thing is here allowed an abundance of room; and no plant, which has not sufficient attraction as a single isolated object, is not considered as deserving a place in the conservatory. The camellias are, of course, the principal objects, and nearly or quite all the room, saving a few shelves, is devoted to the plants. Mr. Becar, as most of our readers well know, from our previous notices of his garden, is one of the most successful cultivators of the camellia; and a more healthy, deep green foliage, or a handsomer and more vigorous growth, we never saw.

Mr. Becar is constantly adding to his collection, which includes all the finest kinds, and also some beautiful ones of his own production. Those now in fine bloom were the following:—*Landrethii*, a fine large plant, five feet; *Prince Albert*, a pretty carnation, flowered variety, but little imperfect in the centre; *Palmer's Perfection*, *Duchess of Orleans*, *Henry V.*, *Buist's Eliza*; *General Washington*, (*Boll's*,) a fine flower, but does not open freely; *Colletti* and *Monteronii*, the last white, striped, and cupped; *Brooklynia*, one of the very best, of a rich dark rose, perfect in form, superbly imbricated, and one of the finest flowers; this is a seedling of Mr. J. B. Smith, of Philadelphia, and was accidentally found among a lot of plants purchased at his great sale some years ago.

Among the seedlings we noticed one very fine one, produced from *C. var. Colvillii*, impregnated with *Donckelaërii*, very large, deep rose, spotted, or marbled with white. Another, much like tricolor, but more double: *imbricatà*, *myrtifolia*, and other magnificent specimens, were also in flower.

We have already remarked (X. p. 41,) upon Mr. Becar's culture of the camellia. The great charm of his collection, is the superior form and vigor of the plants; these are obtained only by constant care and attention; a free use of the knife, and tying out the branches in their proper places, are the two main things to attend to; persevering with these, plants forming perfect pyramids from the pot up, will, in a short time, repay the possessor, one of which is, in truth, worth a dozen crooked and ill-shaped plants, with here and there a blossom.

In the greenhouses, besides numerous small camellias, we noticed many fine pelargoniums and azaleas, and some seedling calceolarias, which have bloomed superbly since our visit. But the camellia excludes most all other plants.

The season was yet too early to see any thing in the open ground.

New York, May 22d. Greenhouse of Mr. T. Dunlap, Broadway.—The large greenhouse here, which is the great attraction of Mr. Dunlap's city establishment, we found well filled with a good stock of showy plants. Since our last visit Mr. Dunlap has removed the glass from that part of the store connecting the greenhouse with it, as it was found impossible to prevent leakage from the glass, which prevented the use of the room for seeds. The Harlem garden furnishes an abundance of flowers for bouquets and plants for sale, and the greenhouse, 100 feet long, is ample for all purposes of show. We hope soon to give a full account of the grounds at Harlem, which now contain six or eight large greenhouses, forcing houses, propagating houses, &c.

Jersey City. Messrs. J. & P. Henderson, Florists.—Messrs. Henderson, one of whom is known to our readers as the author of an excellent article on Transplanting Large Trees, (Vol. XII. p. 248,) have taken the premises formerly occupied by Mr. Briell, who has removed to Flushing, L. I. The principal business of Messrs. Henderson is the raising of vegetables for the New York market, but they also keep two

or three greenhouses well filled with roses, heaths, and some of the most popular and saleable plants. Heaths are raised in considerable quantities, being turned out of the pots in summer, in an airy situation, and taken up, potted, and wintered in frames, by which mode of treatment they make large blooming plants in two years. In our hot and drying climate, they succeed much better in this way than when kept in pots, setting aside the labor and expense attending the care of a good stock. We found one house nearly filled with prairie roses.

The weather being warm, preparations were making for planting out lettuces, early cabbages, cauliflowers, &c., in great quantities.

ART. II. *Description and Engraving of the May Apple.*
By T. S. HUMBRICKHOUSE, Coshocton, Ohio.

THIS apple has been extensively sold by the Myers's from their nurseries. It is different from any apple I know. I

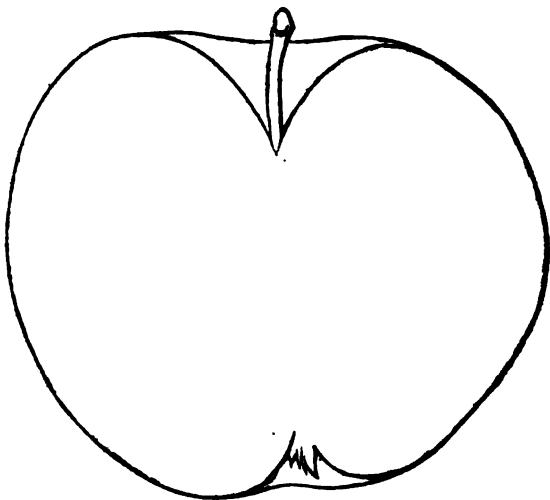


Fig. 28. *May Apple.*

suppose Mr. Samuel Myers, of Richland, can tell its history, and whether it be a new or an old variety. It is a very val-

uable winter sweet apple, keeping sound a long time, and ranking with the Romanite in its keeping qualities, but much before it, both as a cooking and dessert apple. The description is as follows :

Size, medium, two and three quarter inches broad by two and a half deep: *Form*, oblate, narrowing a little towards the crown: *Skin*, smooth, bright yellow, sometimes russet next the stem, with a slight blush next the sun: *Stem*, medium length, three quarters of an inch, slender, and inserted in a regularly funnel-shaped cavity: *Eye*, rather small, and slightly sunk in an irregularly curved basin: *Flesh*, yellowish white, and tender: *Juice*, tolerably abundant and sweet: *Seeds*, small; *Core*, small, broader than deep. Keeps till May, and is in eating by first of January.

Coshocton, Ohio, April, 1848.

ART. III. *Summer Pruning Dwarf Fruit Trees, as practised in France.* By R. THOMPSON, Superintendent of the Fruit Department in the Garden of the London Horticultural Society. *With Remarks.* By the EDITOR.

WE have, from time to time, especially in our Horticultural Memoranda, given brief directions in regard to the method of summer pruning fruit trees. We have also copied numerous papers from our foreign periodicals treating upon the same subject; and our correspondent, Mr. Carmichael, who was formerly in the garden of the horticultural society, under Mr. Thompson, has furnished us with his excellent articles, (Vol. X. pp. 164, 215,) in which the whole system is described, and the *rationale* of the practice made familiar to every cultivator. To his articles we would invite the attention of all who intend to adopt this mode of management, as they are plain, concise, and to the point.

Last season, Mr. Thompson made a tour to Paris, for the purpose of noting the progress of horticulture in that city, and he subsequently published an account of his visit in the *Journal* of the Horticultural Society, (Vol. II. p. 202,) in

which he particularly speaks of the French mode of summer pruning trees. It was our intention to give a full abstract of this article when the Journal came to hand; but, from some cause, not having yet reached us, we now present that portion of it which we find in the *Gardener's Chronicle*, as the season has arrived when this operation of pruning should be commenced.

It is scarcely necessary for us to remark, that, around Paris, as our readers know, from our account of the gardens there, (XI. p. 243,) nearly or quite all the pears are cultivated as dwarfs or pyramidal trees. These specimens, as we have stated, are perfect models as regards form and management, being from twelve to fifteen feet high, symmetrically shaped from the ground up, and, with few exceptions, clothed with fine specimens of fruit.

Practising summer pruning to a great extent ourselves, having more than a *thousand* trees under our care, many of which are in full bearing, we intend to give more in detail the results of our experience, accompanying the same with sketches illustrating the advantages derived from this mode of pruning; but, in the mean time, as cultivators will like to know the opinions of all, we invite their attention to the following hints upon the mode adopted by the best French gardeners, M. Cappe, having the charge of the fruit department of the Jardin des Plantes, which contains some of the finest specimens we saw during our tour. Mr. Thompson appears to have been surprised at their symmetrical appearance, and thus alludes to them:—

“The pyramidal trained pear trees are from ten to fifteen feet high or more, having a regularly tapering outline from the base to the top, where they terminate in a single shoot. The young plant is stopped according to its strength, and so as to furnish side branches. These are not in stages at uniform distances along the stem; on the contrary, almost every shoot which breaks out from the stem is allowed to grow; but the *laterals produced on these are pinched in summer*, and even such of the leading shoots as appear likely to become too strong for the others, are stopped. M. Cappe pinches all the young shoots, not required to form branches, *when in a very young state*; when they have scarcely pushed a finger's

length, they are shortened to about one inch, or from that to one and a half inch. The portion left forms the basis of one or more fruit buds, bearing fruit in the following season, or a spur on which blossom buds are formed for bearing in the second season.

"The advantages consequent on properly managing fruit trees, with regard to summer pinching, are so important that attention to the subject cannot be too strongly urged. By the operation, the shoots necessary to be retained, have the great advantage of more light and air than would be the case if crowded by a multiplicity of laterals, retained till the time of winter pruning, when they must obviously be cut off, either so close as to leave no bud to push, or shortened to within a few eyes of their bases. In the former case, the branch is left naked; in the latter, when the tree is sufficiently vigorous, the eyes left generally push other shoots, to be again cut back in winter; and thus crops of shoots are annually produced, instead of fruit, for many years, or until the tree approaches the state of old age.

"The plan which M. Cappe pursues, succeeds admirably in the climate of Paris. The fruit on the pyramid pear trees under his management is stated, on competent authority, to have been last year exceedingly abundant, large and fine. This season the trees are healthy and vigorous, and well furnished with blossom buds. It may be said that the generally dry, clear air of Paris, is very different from the cloudy and moist climate of many parts of Britain,—the one being favorable for the formation of fruit buds, whilst the other favors the growth of wood and leaves, and therefore, circumstances being different, the same practice may not be equally proper for both. There are, moreover, instances of circumstances differing so widely as to require opposite methods of culture. But this does not hold good as regards summer pinching. In England, the drawback is a dull atmosphere; the shoots and foliage want more air and light. Summer pinching affords this, inasmuch as it prevents the crowding and shading of wood and leaves necessary to be retained, by that which is superfluous; and therefore it must be considered of still greater utility in dull climates than in bright, more necessary in England than in France.

"Supposing the branches of a tree are properly thinned and regulated at the winter pruning, and that, so far as they extend, their number is quite sufficient for the space they occupy, presuming, also, that the tree is in good health, a number of laterals are sure to spring. They are, of course, superfluous, and every one of them should be pinched as already mentioned. If the last year's shoot has been shortened at the winter pruning, then, besides the terminal one on the part left, one, two, or three, next to it, are almost sure to push, and these M. Cappe commences to check by pinching when about three inches in length; but those nearer the base of the shoot he allows to grow till they attain the length of six or eight inches before he shortens them. The terminal bud is of course allowed to go on for the prolongation of the branch. It frequently happens in France, and the liability will be still more in the climate of England, that, after a shoot is pinched back, the newly formed buds on the part left will push a secondary shoot in the same season. When this is the case with those under the care of M. Cappe, *he also pinches these secondary shoots* to an inch or an inch and a half from where they originate. They rarely push again; but if they do, their growths are again reduced as before."

To this we may add the following, also from the pen of Mr. Thompson, which we find in the last number of the *Gardener's Chronicle*:—

"The operation of summer pruning is more especially necessary for trees that have undergone a process of pruning and training than it is for those that have been left to nature. Supposing two trees to be of equal vigor, both furnished with an equal quantity of roots, and differing only in the one having, in consequence of pruning, a much less extent of top; the force of development being equal, it is evident that the shoots will be much more crowded on the pruned than on the unpruned tree. All other circumstances being the same, the crowding will be proportionate to the disparity between the expansion of the respective tops. Instances may be observed of young shoots having only a scattered appearance over the top of a tree formed of branches that have been allowed to take their natural extension, whilst, on the other hand, a tree that has been much cut in at the winter pruning will present

a bush or thicket of young shoots. In the former case, the leaves are in the free enjoyment of light and air; in the latter, they tend to shade and choke each other, unless prevented by summer pruning. The instructions for this operation may be briefly expressed, but, in order that they may be judiciously followed up, a few preliminary observations will be necessary.

"Every leaf has a bud formed in the angle between its base, or footstalk, and the shoot on which it is situated. Some of these buds now forming will push into shoots in the following season; some may push even in the present, and form what are termed laterals; and others will ever remain dormant, or only progress annually as the successive layers of alburnum are deposited, but never appearing externally, unless artificially excited. This may be done to some extent by affording an extra supply of nourishment, but with more decided effect by pruning. If a shoot or branch is shortened, the consequence is, generally speaking, an increased development of those buds that are left. The flow of sap that would have been appropriated by the buds removed will be shared by those that remain, and hence they will be stimulated to greater activity.

"Supposing a shoot of last summer's growth, eighteen inches in length, furnished with eighteen buds, if left unshortened at the winter pruning, it is very probable that only three or four of the whole number would have pushed into shoots, and these situated near the extremity, all the others below remaining dormant. If this shoot had been cut back to within six inches of its base in autumn several of the buds that would otherwise remained dormant would have certainly pushed. If every shoot had been cut back close to its base, latent buds must have burst into shoots from the older wood.

"From what has been stated, the general effects of shortening will be sufficiently understood. There are, however, some circumstances connected with the shortening of summer shoots which require to be pointed out. When the shoot of last season was supposed to be shortened at the winter pruning, its wood at the base was mature, and the buds on the portion left were ready to push in spring, thus affording

ample channels for the sap ; but in the case of summer shoots being similarly shortened it must be observed that the wood is comparatively immature, and the buds imperfectly formed, so that, in fact, these buds cannot readily push, and therefore the flow of sap must, in the mean time, exert its force on older buds, either latent or otherwise ; and hence the danger of causing incipient flower buds to push into shoots, together with a vast number of small shoots from buds which had better remained for the present in a quiescent state. The following mode of proceeding may be, however, relied on as perfectly safe with regard to pear, apple, plum, and cherry trees on walls.

“Commence forthwith to pinch off a few inches from the points of all shoots on the upper part of the wall, except, of course, the leading shoots required to be preserved for the extension of the branches. After a few days, let the points of shoots on the lower portion of the tree be also pinched off ; and, at the same time, a considerable portion of those on the upper part should be still further shortened to within three inches of their bases. It is important to commence reducing the shoots at the upper part of the tree before the lower ; for the latter have always a tendency to become comparatively weak, and this tendency is greatly counteracted by proceeding as above.”—(*Gard. Chron.*, 1848, p. 363.)

In our warm and sunny climate, the trees make even a more vigorous growth than in Paris, if we may judge from the trees that came under observation ; and we have found, after several years' practice, that summer pruning must be kept up with us till the end of August, and, when the autumn months are very warm, even to the end of September. This especially is the case with trees on the pear stock, of such kinds as cannot be grown freely upon the quince. Nearly half of our trees are of this description, but we find no difficulty in making them fruit, almost as early as if they were upon the quince, by the method of summer pruning. In connection with root pruning, the most free growing pears may be brought into bearing in four or five years.

Summer pruning, though of the greatest advantage to dwarf trees, may yet be practised with the best success on standards, bringing them into bearing much earlier and giving them a better head.

ART. IV. *The Camellia ; its History, Introduction, Propagation, Cultivation, and General Treatment, with a Descriptive List of the finest varieties.* By the EDITOR.

It has been our purpose to present our readers with an article upon the culture and management of the camellia for a long period; but various engagements when our space would permit, and a desire to accommodate our correspondents at other times, have induced us to defer it from season to season; the period now having arrived when the plants should be put in order for the coming winter, we have thought it a favorable opportunity to detail the routine of treatment of this most magnificent of plants, without which our green-houses and conservatories would possess but little attraction for a greater portion of the winter season.

The camellia, though very generally cultivated, is yet not often seen in its greatest beauty. The plants are too often crowded together, in order to make room for a great number of varieties, and, consequently, their form is greatly injured, the foliage less ample and rich, and the flowers smaller, less perfect, and displayed in much less profusion than upon well grown and properly managed specimens. A finely formed plant, with its elegant glossy foliage, and exquisite flowers—whether that universal favorite, the old double white, or any of the beautiful colored varieties which now swell up the catalogues—is one of the most superb objects within the whole range of cultivated plants.

So fully entitled to all the care which can be bestowed upon it, the camellia should be found in every collection making the least pretence to variety, brilliancy, or splendor. The cultivation of the plants is perfectly simple, and, though skill and experience are required to secure a full development of their beauty, only ordinary judgment and attention are necessary to obtain a fine display of flowers.

The subject will be arranged under the following heads:—History—Introduction—Propagation—Soil—Potting—Pruning—Winter Treatment—Summer Treatment—Raising New Varieties from Seed—Insects—Descriptive List of Fine Varieties, &c.

HISTORY.

The camellia is a native of China and Japan. In Japan, it forms a lofty and splendid tree, greatly admired for the beauty of its flowers, which are produced from October to April. In all the Japanese gardens, camellias are planted, embracing several varieties. Linnæus conferred upon it the name of *Camellia*, in honor of *George Joseph Camelli*, a Moravian Jesuit, and traveller in Asia.

INTRODUCTION.

According to Loudon, Lord Petre first introduced the camellia into England about or before the year 1739. The Abbe Berbesse states, however, that Father Camelli, after whom the genus is named, first imported it into Europe in 1739. Lord Petre's plants were at first kept in a stove, and, in consequence of this, they were all killed. It was afterwards reimported and treated differently, but it was not until about the beginning of the present century that the camellia begun to be much esteemed in England. The old single red, the type of the family, was the only kind known up to 1792, a period of more than fifty years, at which time the old double white and the double striped were imported : in 1794, the old double red was received ; in 1806, the *Lady Hume* ; *myrtifolia* in 1808 ; *anemoneflora* in 1809 ; *Pompônia* in 1810 ; *fimbriata* in 1816, &c. &c. With the importation of these elegant varieties, the taste for the camellia rapidly increased, and few if any families of plants were more extensively propagated than this. *C. var. candidissima*, *tricolor*, and some other varieties, were not introduced until about 1830. The first seedling raised in England was *C. var. Róssii*, which was first exhibited in 1824.

At what period the camellia was first received in this country is not known ; but, it is believed, about the commencement of the present century. Mr. Floy, nurseryman of Harlem, N. Y., brought over with him, in 1800, a plant of the double white, for John Stevens, Esq., of Hoboken, New Jersey, who had previously received the single red. Subsequently, the other double varieties were introduced soon after their importation to England.

PROPAGATION.

The camellia is multiplied by several methods, viz., by Seeds — Cuttings — Eyes—Inarching — Grafting—and Budding.

SEEDS.

The camellia is readily increased by seeds, which are obtained in abundance, if the flowers are properly impregnated. They must, however, be fully mature. The proper season for sowing is as soon as they are taken from the seed pods, which is generally about the month of September : they may, however, be planted from that time to the end of February. The best soil is composed of peat, loam, and sand, in equal parts. Pans are preferable to pots, as they prevent the tap roots from extending downwards. They should be planted about an inch deep, finishing with a moderate watering, and placing the pots in a warm shady situation in the greenhouse.

The Abbé Berlese, in his *Monography* of the Camellia, states, that the “seeds often remain two years before they vegetate ;” and most English writers make the same remark ; but, so far as our experience goes, and we have raised thousands of plants, we have never known a good seed which did not vegetate in less than six months. Usually, the plants appear above ground about two months after sowing ; but, when the seeds are not planted till February or March, they do not appear so soon, generally in three or four months. We have had plants one foot high ten months after the seed was sown.

The spring after planting, before the plants begin to grow, they are potted off singly into three-inch pots, coiling the tap root round the bottom if very long ; give a good watering, and place in a warm shady situation for three or four weeks, when they may have the same treatment as the old plants. Sometimes they bloom the third year, but generally not till the fifth, and frequently not until the tenth or twelfth year after sowing. We have many plants raised from seeds in 1841, which do not show any signs of blooming.

CUTTINGS.

The principal mode of propagating the camellia is by cuttings. This is done to obtain stocks upon which to inarch or graft the fine varieties, the kind being the old single red, or rapid and free growing seedlings. Probably seven eighths of all the camellias are so cultivated. It is frequently resorted to to increase choice varieties; but, unless such varieties are of very free growth, the plants never make such fine specimens as those inarched or grafted. Cuttings should be treated as follows :—

At any time when the wood is fully ripe, cuttings may be taken off. Generally, this is from July to January, unless the plants make an autumn growth. Select young shoots which are perfectly ripened, and cut them to the length of three or four inches, always making a smooth cut immediately under an eye; pinch off the two or three lower leaves, and the cutting is ready for insertion, as in our engraving, (*fig. 29.*) The pots or pans, in which they are to be planted,



Fig. 29. Camellia, cutting prepared for insertion.

should be previously prepared, by filling them about one third with good drainage, and the remainder with clean sand: make the whole firm, and proceed to insert them about an inch apart, and two inches deep. Place the pots in a frame, with a mild heat, or in a shady part of the greenhouse; keep them regularly watered, and, in two or three months, they will be sufficiently rooted to pot off. If the cuttings are covered with a hand-glass, they will root sooner and with more certainty. Their after-treatment is the same as for old plants, and, if properly treated, they will be sufficiently strong to graft or inarch when two years old.

EYES.

The camellia may be multiplied by eyes or buds, just in the same manner as the grape vine, but the process is more uncertain than cuttings, and only practised by skilful gardeners. They are managed similarly to cuttings, only they re-

quire to be covered with a bell glass, carefully watered, placed in bottom heat, and potted off as soon as rooted. The cuttings should be about an *inch* long, with one eye and a single leaf attached, and should be planted nearly horizontally, with the leaf upwards, just covering the eye with sand. If the leaf damps off, the eye rarely grows.

INARCHING.

Inarching, or, as it is often termed, *grafting by approach*, is the most certain and speedy mode of obtaining good plants, and, until within a few years, since the French gardeners have applied their skill to the increase of the camellia, nearly or quite all the plants were propagated in this way. Supposing the stocks to have been obtained, as we have already directed under the head of *cuttings*, inarching should be done as follows:—

About the month of February or March, just before the plants begin to grow, is the most favorable time to inarch. It may be safely done in August, if more convenient; but the plants are not so well able to bear rude winter treatment as those inarched in March. To the amateur, March is decidedly the best time. The operation is very simple. Select



Fig. 30 Camellia, showing the mode of inarching.

a good healthy stock, and pare off the bark and wood about two inches in length, and about the twelfth of an inch in thickness. Secure the plant, so that it will not be easily moved, within a suitable distance of the branch intended to be inarched, and then proceed to cut away the bark and wood to correspond with the incision made in the stock; fit the two parts together, being careful that the barks exactly join, and bind them firmly with strong woollen yarn, or bass matting, (*fig. 30.*) Attend duly to the watering of the plants, and, in two months, they will be united together. The branch, however, should not be cut off at once. At the end

of this time, the shoot may be partially severed close to the base of the inarching, and, in three or four weeks, it may be separated from the parent plant. Their after-treatment is the same as the old plants, unless they should show signs of not having been well united, when they should be placed in a close frame until the union is complete.

GRAFTING.

Grafting is the most rapid mode of increasing camellias, and is generally practised when the object is to secure a stock of some new and valuable variety, as every bud will make a plant. In the hands of those who have not some skill, and who are not willing to devote considerable care upon the plants, grafting will be an uncertain method of propagation. The operation may be performed at two seasons, viz.—just before the plants begin to grow, in February—and after they have ripened their wood, in August. The latter period is the most favorable.

There are several modes of grafting the camellia, but that most generally adopted is called the *Belgic graft*, (*fig. 31.*)



Fig. 31. Belgic mode of grafting the camellia.

The late M. Soulange Bodin, of Fromont, a successful cultivator of the camellia, practised *cleft-grafting*, but the incision caused by this mode does not heal over readily.

The *Belgic graft* is performed in the following manner:—Select good healthy stocks, and, if very large, take off some of the top and side shoots, unless there is plenty of frame room. Near the base of the stem, cut away a small portion of the wood and bark an inch in length, with a notch at the base, as in our engraving, (*fig. 31, a.*) Then prepare the scions, which should have been previously selected, by cutting them about two inches in length, with a single bud and leaf attached, and cut them on one side only, in the form of a wedge, (*b.*); fit the barks exactly together, bind firmly with strong woollen yarn, and the operation is finished.

The success of this mode of grafting depends upon the after-treatment of the plants; as soon as the stocks are all grafted, they should be placed in a frame without bottom heat, but in a warm part of the greenhouse, where they can be shaded in the middle of the day; the pots should be placed on their sides, with the graft upwards, and should not be too crowded for fear of damp. The sashes should be put on and kept closed as much as possible; if any of the plants appear dry they should be taken out and watered, and returned again to the frame. If the operation is properly done, the scions will be perfectly united in a fortnight or three weeks, when the plants may be taken out, and the top of the stock headed off to within an inch or two of the graft. After this, they may receive the same treatment as established plants.

Other modes of grafting are resorted to, but, having tried them, we can only recommend them as novel, and more uncertain than that which we have now detailed.

SOIL.

A diversity of opinion exists among cultivators as to the most suitable soil for the camellia. Formerly, peat (or heath soil) and sand composed the compost in general use for the plants; and it was considered, by some cultivators, essential to their health, that peat should form the principal component of the soil. Even to the present day, many cultivators use no other compost; the French cultivators, in general, pot their plants in peat and sand. For very young plants, it will answer a good purpose; but, as they get stronger, a soil of more substance is required.

It is to be regretted that the camellia is not better cultivated than we often see it in collections, even under the care of experienced gardeners; but this arises, in a great degree, from the want of a suitable soil. It is important to the health and vigor of camellias, that they should not only be skilfully potted and judiciously watered, but that the soil should be good and properly prepared.

The compost now made use of by the best cultivators of the camellia, is usually a rich yellow or hazel loam, taken from the surface of an old pasture, and laid in a heap for five

or six months, turning it over once or twice to hasten decomposition. If put together early in the spring, it will be ready for use in July or August. With a good stock of this on hand, a small quantity of peat, old manure, or leaf-mould, and sand, a compost may be made in which the camellia may be grown to the greatest perfection. The proper proportions are *two* parts of loam,—*one* part peat and *one* part leaf mould or old manure, adding sand sufficient to give freeness to the soil, which is usually about *one eighth* of the whole. These should be well mixed together, by turning them over several times, merely throwing out any large stones, and breaking up the large lumps, but, on no account, should it be sifted, as is too often done. For seedlings and young plants, little more sand and peat may be added.

REPOTTING.

Next to a suitable soil, the operation of repotting is one of great importance as regards the future health of the plant. It would seem to most persons to be a labor requiring no great art, simply to shift a plant from one pot to another; but it is only those who have had the experience, who can appreciate the difference between a plant ordinarily potted and one skilfully done. In the former case, in many instances, the plant may be taken out of the pot, six months afterwards, with the ball just as it was when shifted, without having made a new root, and in the latter, the roots would have again become so numerous as to form another compact ball. The art of potting mainly consists in properly removing the roots from the old ball, and in making the soil sufficiently firm, without being hard. For, if too firm, the water will not penetrate the earth, and, if too loose, it will be so constantly saturated with water as to often cause the death of the plants.

The seasons of repotting are in the spring *before* the plants begin to grow, and in summer, after they have ripened the new wood, which is usually in July. The latter season we greatly prefer, not only because there is more leisure to do the work properly, but because the new soil does not get so much exhausted before the time of flowering. The best English cultivators repot in July and August.

The size of the pots must be regulated somewhat by the vigor of the plants; as a general rule, the pot into which the plants are to be shifted should be *one inch* deeper, and *one inch* broader all round than the one in which it was growing; but often a strong growing specimen, which it may be an object to encourage, may be safely shifted into a pot one half larger than the one from which it was taken.

The first object is to prepare a good quantity of broken pots for drainage, for no plant is more impatient of an excess of moisture at the root than the camellia; place over the hole one or two large pieces, and, on these, smaller ones to the depth of half an inch for small pots, and one inch for large ones; this done, fill in with the above compost an inch or more, and it is then ready to receive the plant.

Now turn the plants out of their pots, first observing that they are neither too dry nor too wet, the medium being so that the earth will *crumble* off with the fingers; carefully remove the soil and old roots to the depth of an inch, using a sharp pointed stick to loosen it if the roots are much matted; and cut away all dead roots with the knife; this done, place the plant in the new pot sufficiently deep to allow *half an inch* between the surface and the rim of the pot in small plants, and an *inch* in large ones. Make the earth moderately firm with the potting-stick, and finish with a good watering from a fine rose, so as to settle the surface; then place the plants away where they are to stand, until the season for removing to the greenhouse or conservatory.

(To be continued.)

ART. V. *Floricultural and Botanical Notices of New and Beautiful Plants figured in Foreign Periodicals; with Descriptions of those recently introduced to, or originated in, American Gardens.*

Mr. Hartweg's return from California.—Mr. Hartweg has returned from his expedition to California, where he was sent by the London Horticultural Society. He has brought home

with him four boxes,—two containing dried specimens, and two, bulbs, pine cones, and other seeds; and more packages, which were despatched from California before him, are expected every day. From seeds previously received from him, the following are growing in the Society's garden:—*Ceanothus papillosus*, *dentatus*, and *rigidus*; *Pinus Benthámia* and *californica*; *Zauschneria californica*; the California horse-chestnut, (*Pavia californica*,) said to be sweet; a Scarlet Lily; a female *Garrya elliptica*; *Laurus regalis*, a sweet evergreen laurel; a *Prunus*, with glaucous leaves, and said to have pendulous flowers; several evergreen oaks; *Abronia umbellata*, a pink flowered trailing plant, an inhabitant of the sea-side, said to be finely scented in the evening; a *Mesembryanthemum*, and various others.

Mr. Fortune has resigned the curatorship of the Botanic Garden, Chelsea, and has engaged with the East India Company to proceed to China, for the purpose of procuring tea plants and seeds for their tea plantations, in the Himalayas. *Mr. Thomas Moore* succeeds *Mr. Fortune*.

The new Tree Pæonies brought home by Mr. Fortune, have mostly flowered the past spring in the garden of the Horticultural Society, and *Dr. Lindley* gives the following account of them:—Of *Mr. Fortune's* Moutan pæonies, planted near the Council Room, one flowered in 1847, and was named *picta*. It is described in the *Journal* of the Society, as “having leaves of a dull bluish green,” not veined or tinted with purple, and as having flowers the size of *P. Moutan rosea*, and with something of its appearance, but more semi-double. The petals are stated to have a rose-ground color, streaked, stained, and veined with rich deep rose towards the edges, especially on the inside; rather ragged at the points, something in the manner of parrot tulips. It is perhaps as hardy as *P. Moutan rosea*, and very handsome.” This year, the following have flowered and have received names:—*P. Moutan globosa*; this proves to be a fine large white sort, very double, and having the base of the petals stained with large blotches of deep purple; it is stated to resemble *P. Moutan papaveracea*. *P. M. violacea*; this is said to be a distinct and fine variety, with deep lilac, nearly single flowers; the foliage deep green; it is considered to be quite new. *P. M.*

salmónæa: this proves to be a good double kind, resembling the flesh-colored variety of *P. officinàlis*; the outer petals, when fully expanded, are a pale salmon color; the inner somewhat darker; it is reported to be a good and distinct variety. *P. M. lilacina*, the variety stated by Mr. Fortune to be blue, has, unfortunately, turned out to be only a deeper lilac than *P. M. Bánksiæ*, which its flowers and foliage otherwise resemble, except that the former are perhaps more double; it is, however, a desirable variety. The other plants which have blossomed, have not proved distinct from the old *P. M. Bánksiæ*.

Beautiful varieties of Phlox Drummondii.—Two new varieties of this fine annual have been introduced this year, named *P. var. Leopoldii* and *oculàta*; the latter, one of the most exquisite things we have recently seen: the flowers are *pure white*, with a very distinct and brilliant *violet eye*; grouped with the scarlet, maroon, purple, violet, lilac, rose, pink, and other colored varieties, which this fine annual sports into, it forms a most striking object. The other, *P. var. Leopoldii* has rich rosy violet flowers, with a *white eye*; and, though not so distinct as *oculàta*, it is a showy variety. By hybridization and judicious selection of seeds, no doubt we shall soon have striped and mottled flowers as we already have of the perennial sorts, now so generally cultivated and every where admired.

Twenty-five kinds of achimenes have been sent to the London Horticultural Society by Mr. Skinner, all of which are reported to be *new*—one is said to have flowers as large as *A. longiflora*, and of a fine rose color. They will prove great acquisitions to this superb family of summer flowering plants, so valuable for the decoration of the greenhouse at that season.

Two new and splendid species of Fuchsia have been introduced from South America. One is the *F. spectàbilis Hook* which is stated to be "upon the whole the handsomest species yet known." The flowers are a deep crimson; the petals *flat* and bright rich red, the stigma very large and pure white, the effect of which is to render its own fairness fairer, and the richness of its rosy bed richer. The leaves are broad, oblong, very firm, and a dark velvety green, although they

have scarcely any hairs. It was found by Mr. Lobb on the Andes of Cuenca, in Peru, growing two to four feet high.

The other is *F. loxensis*, a shrubby species of the habit of *fúlgens*, *serratifolia*, &c. The leaves are large and in whorls. The flowers proceed singly from the axils of the leaves, and grow each on a separate stalk; they are of a large, tubular form, and assume a slightly pendent position. The tube of the corolla is slender, about three inches long, and of a rich purplish crimson; the petals are, individually, of a roundish ovate form, and expand widely, forming a nearly circular face, nearly an inch in diameter; the color of the petals, a bright scarlet. The entire flower is very richly and brilliantly colored.

In our notices of new plants, we have, in the last and present volume, only given a full account of the most showy kinds for general cultivation; but, as many of our readers are desirous to see, at least, a notice of every new plant, we have concluded to name all, adding only the character of the plant, whether hardy or tender, its native country, &c., to such as we do not deem entitled to introduction into all collections.

71. ACHI'MENES GLOXINÆFLO'RA *Forkel* Gloxinia-flowered Achimenes. (*Gesneriaceæ.*) Mexico.

A stove plant; growing one foot high; with white and yellow flowers; appearing all summer; increased by the young tubers; cultivated in coarse peat and sand. *Flore des Serres*, 1848, pl. 318.

This is certainly one of the most beautiful and *recherche* of all the fine species of achimenes which have yet been introduced, and it will rank with the *A. picta* and *longiflora* among the most elegant of summer flowering plants. It appears like an achimenes with the blossoms of a *Gloxinia*; the flowers are very large, of a pure white, with an agreeable odor, and the interior of the tube, which is an inch long, is of a deep yellow, elegantly spotted with numerous small purple specks. It appears to be a sort of natural hybrid. It was introduced from Mexico in 1844, and flowered for the first time last June, in the Garden of the Royal Chateau of Lacken. It requires the same treatment as the other species. (*Flore des Serres*, Feb.)

REVIEWS.

ART. I. *A Manual of the Botany of the Northern United States, from New England to Wisconsin, and south, to Ohio and Pennsylvania, inclusive, &c. &c.* By ASA GRAY, M. D., Fisher Professor of Natural History in Harvard University. 1 vol. 12mo. pp. 710. Boston and Cambridge, 1848.

WE have examined this late work of Professor Gray with much pleasure and interest. The reputation, which this gentleman sustains as a botanist, entitles to great respect whatever emanates from his pen. Enthusiastically and ardently devoted to this branch of natural science, his attainments, as well as the results to which he arrives, are equally subjects of praise. With means and facilities, not ordinarily at command of American botanists, and in communication with men of like science throughout the country, he has it in his power to render his labors as practically correct as could be reasonably anticipated. Surrounded with the rich treasures of various herbaria from all quarters, and at the head of an establishment long known for its native botanical value at Cambridge, we can scarcely conceive a more facile or delightful opportunity to secure, amidst the amenities of science, the production of works of value to the student or to the inquirer in the several departments of botany.

It would, at the first glance, seem scarcely possible that a new manual could have been needed among the profusion of similar works and the abundance of local floras. Almost every season has brought out some new hand-book of botany, for these several years past. To judge from their almost *annual* appearance, there must be a remarkable demand, or else studies of this department of natural history are much on the increase. We have looked into the greater proportion of these, as we have had occasion to use them as authority, or for the purpose of determining species coming under our observation, from the earlier editions of the *Florula Bostoniensis*, of Dr. Bigelow, to the last appearance of the venerable Eaton's *Manual*, and the still latter volumes of Wood,

These, heretofore, to the student in botany, have been sealed and secret forms, which have set at defiance his efforts to discover; and, while he has admired their elegance, beauty, or minute wonders, he has been obliged to be content to know their history in the most meagre and unsatisfactory way. Scattered, too, as were their original descriptions, through rare, costly, and foreign works, (the production of European botanists, to whom they were at first sent by Mühlenberg and earlier collectors of North American plants,) scarcely any one seemed capable of telling what were the most ordinary forms which our localities furnished. Very brief descriptions of a few, were to be met with in the later editions of Eaton's *Manual*, affording a meagre assistance to those, who, in this department, may be said to have "pursued knowledge under difficulty." With the present facilities, we are happy to add, in the words of Prof. Gray, in his Preface, (p. x,) "it may be hoped that these beautiful but neglected tribes will become as familiar to botanists as our more conspicuous flowering plants now are."

The specification of another obscure, but deeply interesting order, the LICHENES, was intended to have been embodied in this work. The value of the accurate study of these lower forms of vegetation cannot, at this time, be exhibited; sufficient, however, may it be to say, that, for subjects of curious research and singular advantage, scarcely any tribe exceeds them.

Especially do I regret, says Dr. Gray, that the unexpected bulk of the volume has compelled the omission of the family of the *Lichenes*, after they had very carefully been prepared expressly for this work, in compliance with my invitation, by the well-known lichenologist of this country, Mr. TUCKERMAN. Nothing but the apparent impossibility of including the whole within the covers of a single duodecimo volume, and the assured expectation that it will immediately be given to botanists in another form, has reconciled me to the exclusion of this important contribution. (Preface, vi.)

This contribution, it is our pleasure to add, has since appeared in the *Proceedings of the American Academy of Arts and Sciences*, and also in the form of a "Synopsis."

A rich branch of botany is to be found in the vast number of Algæ, which, as seaweeds, or as the tenants of our fresh-

water streams and ponds, and some, the almost ærial inhabitants of humid earth, stones, or damp situations, are scattered profusely over the area of our country. We are aware that several students, eminent for their patience of research, are already interesting themselves in their investigation, and confidently expect that our native flora will, ere long, be represented in these particulars, of so rich and varied a character. A reach of sea-coast, extending through so many degrees of latitude, must furnish a most varied exhibition of marine forms, of which, if some should prove identical with those of Europe and of the old world, others will doubtless represent the peculiarities of our own continent.

The labors of Schweinitz, in the last and lower order of fungi, are known, and can be estimated only by those who are somewhat acquainted with this vast group of plants. In the fourth volume of the *Transactions of the American Philosophical Society*, Philadelphia, (New Series,) may be found mention of 3,098 distinct species, composing a synopsis of the fungi of Middle North America, and mostly detected in Pennsylvania and the Carolinas. Of almost every form of grotesqueness to that of elegance, and growing on almost every kind of organized matter in process of decay, these wonderful plants are as interesting, in the economy they subserve in nature, as they are highly curious in their elaborate structure. Requiring powerful microscopes to examine their internal or more concealed proportions, in order to accurately classify them, they have not received, hitherto, except in such striking instances as we have just noticed, the attention which their importance deserved. Some of the common manuals only, have given a very imperfect and brief list of a few more generally known or supposed to be determined; and this noble field of enterprise has lain almost totally neglected for want of means to explore it. We are, therefore, happy to add, in continuance of Dr. Gray's remarks, in his preface, so often quoted by us in this our present notice, that, "in a second edition, I hope to give, by means of a supplementary volume, and through the aid of accomplished collaborators, not only the Lichenes, but also the two remaining orders of the lower Cryptogamous plants, namely, the *Algæ* or seaweeds, and the *Fungi*." (Preface, l. c.

Succeeding the preface, in which the plan of the work is exhibited and many important items specified, is an introduction, consisting of brief outlines of botany, which contain very valuable matter to the beginner, and explain, in a manner easy to be understood, much that is curious in vegetable physiology. Under the several sections, the following subjects are treated:—"1. Plants in general. 2. Organs of Vegetation in general. 3. The Root. 4. The Stem: * its external modifications; ** its internal structure. 5. The leaves: * their nature and structure; ** their conformation and parts; *** their arrangement, duration, &c.; **** stipules. 6. The Organs of Reproduction. 7. The Inflorescence. 8. The Flower: * its component parts, structure, &c.; ** its symmetry; *** internal structure of the pistil, &c.; **** ovules, fertilization. 9. The Fruit. 10. The Seed. 11. Cryptogamous, or flowerless plants. 12. Classification and Nomenclature.

Under the section, treating of the ovules and fertilization, we find the following facts of much interest to the practical and experimental florist:—

179. The ovules are fertilized through the agency of the pollen. The pollen grains, that fall upon the stigma or some of them, soon emit, through some part of their thickish outer coat, a delicate prolongation of the thin and extensile inner coat, in the form of a slender tube, filled with the fluid, which the grain contains, and with the minute molecular matter that floats in it; this tube penetrates the stigma, and imbeds itself deeply in the loose tissue of the style. Shortly after, similar tubes or threads, generally supposed to be prolongations of these, are found in the placenta, whence they have been often traced into the orifice of the ovule, or into contact with the projecting apex of the nucleus, in which the nascent embryo subsequently appears, first as an apparently single cell or vesicle of cellular tissue, suspended by a thread-like chain of smaller cells. This primary cell soon gives rise to a mass of minute cells, which, as they increase and grow, are at length fashioned into the ultimate and specific form of the embryo.—(p. xxxi.)

The arrangement of the species is after the natural method, and no indication of the Linnæan or sexual system appears in connection with them. This, we have heard suggested to be a defect, especially in consideration of the beginner; but to obviate in some measure the objection which, at first sight,

might appear to be prominent, an ingenious synopsis is so contrived, as "not only to exhibit the Linnæan arrangement, but also to serve as an artificial key to the genera, which, at the outset, the student will occasionally need." (Introduction, p. vi., note.)

We have been much gratified to note the accentuation of all the generic and specific names,—a system never adopted in any other publication in this country, except this magazine; and it will be a great aid to the correct pronunciation of botanical names.

All common and popular names are excluded from the index, and the list of synonymes is also omitted; the last, in order to condense as much as possible. To those who are troubled with short memories, or who are more familiar with the trivial nomenclature, the first-mentioned omission will be the most sensibly perceived; but, with these secondary and scarcely important considerations, we recommend Dr. Gray's *Manual of the Botany of the Northern United States* to all who are anxious to possess the knowledge of our own flora according to the last and best system of nomenclature, and to add to such information much other valuable instruction towards their pleasure and profit.—*J. L. R.*

MISCELLANEOUS INTELLIGENCE.

ART. I. Domestic Notices.

New York State Agricultural Society.—This Society will hold its annual fair at Buffalo, on the fifth, sixth, and seventh days of September next.

The following is the list of premiums for flowers and fruit, *open to all exhibitors*:—

FLOWERS.

Professional List.

Greatest variety and quantity of flowers,	\$5 00
DAHLIAS.—Greatest variety,	5 00
Best 24 dissimilar blooms,	3 00
ROSES.—Greatest variety,	5 00
Best 24 dissimilar blooms,	3 00
PHLOXES.—Best 10 varieties,	3 00
Best seedling,	2 00

VERBENAS.—Greatest variety and number,	.	.	\$3 00
Best 12 varieties,	.	.	2 00
Best seedling,	.	.	2 00
GERMAN ASTERS.—Best collection,	.	.	3 00
PANSIES.—Best and greatest variety,	.	.	3 00
Best 24 varieties,	.	.	2 00

Amateur List.

Greatest variety and quantity of flowers,	.	.	Silver medal.
DAHLIAS.—Greatest variety,	.	.	Silver medal.
Best 12 dissimilar blooms,	.	.	3 00
ROSES.—Greatest variety,	.	.	Silver medal.
Best 12 dissimilar blooms,	.	.	3 00
PHLOXES.—Best 6 varieties,	.	.	3 00
Best seedling,	.	.	2 00
VERBENAS.—Greatest variety,	.	.	3 00
Best 12 varieties,	.	.	2 00
Best seedling,	.	.	2 00
GERMAN ASTERS.—Best collection,	.	.	3 00
PANSIES.—Best and Greatest variety,	.	.	3 00
Best 12 varieties,	.	.	2 00

General List.—Open to all Competitors.

Best collection greenhouse plants owned by one person,	.	Silver medal.
Best floral design,	.	Silver medal.
Second best,	.	\$3 00
Best floral ornament,	.	Silver medal.
Second best,	.	3 00
Best hand bouquet, "flat,"	.	3 00
Second best,	.	2 00
Third best,	.	Wash. Let.
Best hand bouquet, "round,"	.	3 00
Second best,	.	2 00
Third best,	.	Wash. Let.
Best and largest basket bouquet with handle,	.	3 00
Second best,	.	2 00
For the most beautifully arranged basket of flowers,	.	Diploma.
Best floral exhibition by any horticultural society,	.	Gold medal.

FRUIT.

APPLES.—For the greatest and best variety of good table apples, 3	
of each variety, named and labelled, grown by exhibitor,	
	Diploma and \$10 00
Second best,	5 00
Third best,	Trans.

The best 12 varieties of table apples,	\$5 00
Second best,	Trans. and 2 00
The best 6 winter varieties,	3 00
Second best,	Trans. and 2 00
For best fall seedling apple, for all purposes, with description of tree, history of its origin, &c. One dozen specimens to be exhibited,	5 00
Second best,	2 00
PEARS. —For the greatest number of varieties of good pears, named and labelled,	
Second best,	Diploma and 10 00
Third best,	Diploma and 5 00
For the best collection of first rate autumn pears, named and labelled,	Trans.
Second best,	Diploma and 5 00
For largest and best collection of winter pears, named and labelled,	Trans. and 2 00
Second best,	Diploma and 5 00
Best collection of newly introduced pears, with a description, &c.,	Trans. and 2 00
PEACHES. —Best 12 varieties, labelled,	
Second best,	Diploma and 5 00
Best 6 varieties, labelled,	9 00
Second best,	3 00
Best 12 peaches,	2 00
Second best,	2 00
Best seedling variety, 6 specimens,	Trans.
Second best,	3 00
PLUMS. —Best collection of plums, 6 specimens each variety,	
Second best,	Diploma and 5 00
Best 6 varieties of good plums, 6 specimens each,	3 00
Second best,	2 00
Best 12 plums, choice variety,	2 00
Second best,	Trans.
Best seedling plums, with description,	Diploma and 5 00
Second best,	2 00
NECTARINES AND APRICOTS. —Best and greatest number of good varieties, 6 specimens each, labelled,	
Second best,	3 00
Best 12 specimens of any good variety,	2 00
Second best,	2 00
QUINCES. —Best 12 quinces of any variety,	
Second best,	Trans.
Third best,	3 00
GRAPES. —Best and most extensive collection of good native grapes, grown in open air,	
	2 00

Second best,	\$2 00
Best 3 varieties of native or foreign grapes, grown under glass, 3 bunches each to be shown,	5 00
Second best,	2 00
Best dish of native grapes,	Trans.
WATERMELONS.—Best 6 specimens of any variety,	3 00
Second best,	2 00
MUSKMELONS.—Best 6 specimens of any variety,	3 00
Second best,	2 00
CRANBERRIES.—Best peck of domestic culture,	8 00
Second best,	5 00

To be accompanied with a full description of the manner of cultivation, nature of soil, &c.

Any premiums may be withheld, in the discretion of the committee, if the samples exhibited are not worthy of a premium.

The fruit exhibited, for which premiums are awarded, to be at the disposal of the committee.

12 volumes of Downing, common edition, and 12 of Thomas's Fruit Culturist, will be awarded by the committee, in their discretion, for choice fruits not enumerated.

[Liberal premiums are offered for vegetables, but we have not room for the list.]

Discretionary premiums will be awarded on choice garden products not above enumerated.—*B. P. Johnson, Secretary.*

Albany and Rensselaer Horticultural Society.—The annual meeting of this society was held at the agricultural room, in Albany, on the 6th of May,—*J. Rathbone, Esq.*, president, in the chair.

The following persons were elected officers for the ensuing year.

President.—*Joel Rathbone.*

Vice Presidents.—*D. S. Vail, Troy; Dr. H. Wendell, Albany; E. P. Prentiss, Bethlehem; V. P. Douw, Greenbush.*

Secretary.—*B. P. Johnson, Albany.*

Treasurer.—*A. E. Brown, Albany.*

Managers.—*Amos Briggs, Schaghticoke; S. E. Warren, Troy; J. D. McIntyre, Albany; William Burnell, Troy; James Henry, Watervliet; William Newcomb, Pittstown; James Wilson, Albany; A. Osborn, Watervliet.*

Exhibitions for 1848 will be held as follows :—

At Albany, 2d Wednesday, 14th June; at Troy, 2d Wednesday, 12th July; at Albany, September, annual show; and 2d Wednesday of February, 1849, (annual meeting.)

FIRST EXHIBITION OF 1848.

The Albany and Rensselaer Horticultural Society held their first exhibition for the season, in the large room of the Geological buildings, on Wednesday, the 14th instant, *Joel Rathbone, Esq.*,—President of the Society,—in the chair.

The show was all that the most sanguine friends of Horticulture could desire, and the Hall was crowded with ladies and gentlemen during the day.

FRUIT: The committee on fruit reported that there was exhibited:—By J. Rathbone, of Kenwood, Cincinnati Pine and Virginia Scarlet strawberries. The Cincinnati Pine is a new variety from the West, said to be prolific and hardy, and, without being of first character, is a desirable variety:—By V. P. Douw, of Waldenhook, Greenbush, Iowa and Ross's Phoenix strawberries:—By Dr. John Wilson, of Bethlehem, White Alpine, Virginia Scarlet, and Black Prince strawberries:—By E. P. Prentice, of Mount Hope, Ross's Phoenix, Virginia Scarlet, Bishop's Orange, early Scarlet and Hovey's seedling strawberries.

By Dr. Herman Wendell, Boston Pine, Iowa, Hovey's Seedling strawberries; also, foliage, flowers, and unripe fruit, of the new and much talked of Aberdeen Beehive—but the plants, having been imported this season, were not sufficiently strong to develop the fruit, so that the committee might be enabled to judge of its true character:—By B. B. Kirtland, of Greenbush, Iowa strawberries of beautiful appearance:—By Luther Tucker, of Hope Cottage, Bethlehem, Royal Scarlet, a fine variety, of beautiful appearance, much resembling the Ross's Phoenix, and Stoddart's Washington Alpine strawberries:—By Jacob Henry, of Watervliet, Virginia Scarlet strawberries: By E. Wickes, of Albany, Royal Scarlet, and Iowa strawberries—the latter is a variety lately introduced from the West; it is prolific, hardy, agreeable in flavor, large in size, and beautiful in appearance, but will not bear transportation, as it becomes soft, and it does not possess the high flavor of many of the older and favorite varieties.

The committee awarded the first premium of \$2 00, to V. P. Douw, of Greenbush, for beautiful specimens of Ross's Phoenix; and the second premium of \$1 00, to E. P. Prentice, of Mount Hope, for well-grown and beautiful specimens of Bishop's Orange, a well known favorite variety.

In coming to a decision as to the merits of the respective varieties, the committee took into consideration the size, flavor, and general appearance of the specimens offered for competition.—*Herman Wendell.*

PLANTS AND FLOWERS: The committee on greenhouse plants and flowers, report, that there were exhibited by J. Rathbone, pelargoniums in pots, Bridegroom, Dowager Queen, Victoria, Garth's Perfection, Duchess of Kent, Anson's Superb and Imperial; Fuchsias, coccinea, globosa, fulgens, Venus Victrix, multiflora, Emeli Perfecti, Passiflora Loudonir, Stapelia variegata, Burchella, &c., twelve distinct varieties of Picotee pinks, and several varieties of roses, among them were Solitaire, La Reine, Prince Albert, Rivers, Souvenir de Malmaison, &c. &c.:—By V. P. Douw, of Greenbush, several varieties of pansies, eight varieties of Picotee pinks, and a large number of choice roses, a list of which were not handed to the committee.

By Dr. Herman Wendell, twenty-five different varieties of roses, among them were Madam Laffay, Gen. Dubourg, Dr. Roques, Prince Albert, Great Western, London Pride, Fulgens, George the 4th, Henry Planter, Souvenir de Malmaison, Palagii, Luxemburg moss, Cristata moss, Old Blush

moss, Persian yellow, &c. &c. ; Phloxes, Van Houttii, Grato and suaveolens, Philadelphus multiplex, several varieties of pansies, Paisley pinks, pæonies, Humei and roseum fragrans, &c. &c.

By James Wilson, seventy-five varieties of roses, among them were Persian yellow, Donna Sol, Marjolin, George the 4th, Madam Hardy, Queen, Leda, Princess Lambelle, Great Western, La Tour D'Auvergne, Leopold, Washington, London Pride, Nelly, Pampone Bicolor, Cerise Superba, Village Maid, Cristata moss, &c. &c. Twenty varieties of pansies, three varieties of daisies, red and white, fraxinella, Clematis erecta and integrifolia, perennial Indian poppy, pyrethrums, pæonies, Humei, fragrans, Pottsii, Reevesii, &c., six varieties of beautiful rocket larkspurs, twelve varieties of verbenas, six varieties of petunias, Phloxes maculata, Van Houttii, suaveolens, and a large and beautiful collection of perennial and biennial flowers.

Charles H. Merriitt, of Troy, twelve varieties of roses, viz : White Unique Moss, Cristata Moss, Striped Unique, London Pride, Pink Moss, Madam Hardy, Lord Nelson, Lansezeur, Queen of France, &c. ; ten varieties of verbenas, and also a collection of perennial flowers :—Henry Vail, of Ida Farm, Troy, a large collection of beautiful pæonies :—Wm. H. De Witt, Albany, Royal Provence, George the 4th, Provence, and York and Lancaster roses ; Red Maroon and Sulphurea dahlias ; several varieties of Sweet Williams ; Canterbury bells, and Pæonia Humei :—E. P. Prentice, of Mount Hope, a number of choice roses, pæonies, and other flowers ;—Dr. J. M. Ward, a most splendid specimen of Magnolia macrophylla, grown on his farm in New Jersey, which elicited much admiration from the visitors at the exhibition.

PREMIUMS : The committee awarded the premiums as follows :—

Roses.—For the best exhibition, to James Wilson, \$3 00. For the best twelve distinct varieties, viz : Persian Yellow, Gen. Foy, Village Maid, Washington, Pompone Bicolor, Cerise Superba, Nelly, Donna Sol, London Pride, Margolin, La Tour D'Auvergne and Leopold, \$2 00—For the best six distinct varieties, viz : Cristata Moss, Great Western, Leda, Queen, Danviers, Princess Lambelle, \$1 00.—Both to James Wilson.

Pinks.—For the best six distinct varieties, to J. Rathbone, \$2 00. For the best three distinct varieties, to J. Rathbone, \$1 00.

Pæonies.—For the best collection, to V. P. Douw, \$2 00. For the best six varieties—viz : Humei, fragrans, Pottsii, Reevesii, Whiteji, and Alba—to James Wilson, \$1 00.

Pansies.—For the best twelve distinct varieties, to James Wilson, \$2 00. For the best six do., to Dr. Herman Wendell, \$1 00.

Fuchsias.—For the best six varieties in pots, viz : Fulgens, Venus Victrix, multiflora, Emile's Perfection, globosa and coccinea, to J. Rathbone, \$2 00.

Annual and Perennial Flowers.—For the best display, to James Wilson, \$2 00. For the best six different varieties of plants in pots, to Joel Rathbone, \$2 00.

The committee also award a gratuity of \$1 00 to Wm. H. DeWitt, for five varieties of beautiful dahlias.

The committee cannot close their report, without expressing to the society their satisfaction at the beautiful display of choice and rare flowers offered for exhibition, nearly all of which exhibited great skill in their respective growers.—*Wm. Newcomb, Chairman.*

FLORAL DESIGNS, BOUQUETS, &c.—The committee beg leave to report that Dr. Herman Wendell exhibited a large pyramidal floral design, composed of roses, pinks, lilies, verbenas, &c. &c.—a centre-table bouquet composed of rare roses, phloxes, pinks, verbenas, &c. &c.—a basket-bouquet with handle composed of rare rose-buds, pansies, pinks, verbenas, forget-me-nots, &c. &c. on a moss ground, to which the committee awarded the premium of \$2 00.

Mr. E. P. Prentice exhibited a large round bouquet for centre-table, and composed of roses, larkspurs, pæonies, &c. &c., to which they have awarded a discretionary premium of \$1 00. Mr. James Wilson exhibited a large flat bouquet for mantel vase, composed of roses, hydrangeas, larkspurs, pæonies, honeysuckles, &c.—a flat hand bouquet, composed of hoyas, scabious, epacris, camellias, moss rose-buds, pinks, geraniums, &c., to which the committee awarded the premium of \$1 00—also a round hand bouquet composed of about the same varieties, to which the committee awarded the premium of \$1 00. Mr. J. Rathbone exhibited two beautiful basket bouquets, with handles composed of roses, pinks, &c.—also a large pyramidal floral design. Mr. D. T. Vail exhibited a large round bouquet for centre-table vase, composed of roses, pinks, larkspurs, calceolarias, &c., to which the committee awarded the premium of \$2 00.

Mr. Wm. Newcomb exhibited a large flat bouquet for mantel vase, composed of a choice collection of rare and beautiful perennial and biennial flowers:—verbenas, ten varieties, *Campanula pyramidalis*, Pearl flower, pelargonium, periwinkle, pinks, *Dianthus barbatus*, varieties, carnation, loniceria, trumpet monthly, do. variegated, *Cyanus-Major*, six varieties, roses, Burnet, red moss, Nigra, Bulton, Ferox and four other varieties, *Delphinium ajacia*, do. Bee, do. grandiflora, do. cærulea, French rocket, phloxes, lilies, polemoniums, white and purple, *Polemonium* Greek, *Lupinus polyphyllus*, Feathered hyacinth, *Flos adonis*, Iris, yellow and blue, columbines, Rose acacia, Gum acacia, Musk flower, Pæonies, Whiteji, Humei and fragrans, myosotis, garden elder, Ragged robbin, to which the committee awarded the premium of \$2 00; also, a small hand bouquet, composed of roses, verbenas, Feathered hyacinths, Greek polemonium, &c. &c.

Mr. John Wilcox exhibited a large floral design, of pyramidal shape and leaning, (after the manner of the Tower of Pisa,) composed of roses, lilies, pæonies, larkspurs, pinks, campanulas, valerians, phloxes, &c. &c., \$2 00.—*John B. Gale, Chairman.*

VEGETABLES: The committee on vegetables respectfully report, that although the weather for the past month has been very unfavorable to the growth and ripening of all vegetables in the open air in this vicinity, there was presented quite a respectable show of a number of varieties of very fine esculents in competition for premiums. V. P. Douw exhibited Landreth's early peas, four very beautiful heads of cauliflowers, (these attracted the

attention of all visitors,) some fine heads of lettuce, Turnip beets, Giant rhubarb, and three remarkably large cucumbers, of a variety called the "Roman Emperor." E. P. Prentice, of Mount Hope, exhibited cauliflowers, Turnip beets, Giant and Victoria rhubarb, (six stalks of the latter weighing four pounds,) Early Racehorse and Prince Albert peas, White-spine cucumbers, (very fine,) Early York cabbage, and some fine heads of Silesian lettuce.

Dr. Herman Wendell, of Albany, exhibited some stems of the Hoosung, a new vegetable lately introduced from China by the London Horticultural Society, and which Dr. W. informed us, should, after being stripped of its leaves, be cooked and eaten in the same manner as Asparagus, which the stems in some degree resemble. He also exhibited four new varieties of lettuce, viz: the Artichoke-leaved, the Malta, the Swedish or Sugar, and the Imperial, and some fine stems of Victoria rhubarb. The Malta was a remarkably bitter variety, but one which the committee believe, when eaten as a salad prepared with the proper condiments, will be greatly relished by *bon vivants*. The Artichoke-leaved variety is a curious but very agreeable one. So also is the Sugar and Imperial. The committee cannot allow the opportunity to pass, without calling the attention of the Society to these successful attempts of Dr. Wendell, to introduce new varieties of vegetables from other countries, as worthy of all praise, and highly honorable to him as a member of the Society, and they would recommend that a discretionary premium be awarded him.

Joel Rathbone exhibited Giant rhubarb, Early York cabbages, Admiral lettuce, Early June, and Racehorse peas. D. Thomas Vail, Troy, exhibited some very fine heads of Early York cabbage. Jacob Henry, of Watervliet, exhibited some very fine Early June peas. Frederick Kiesel, near the Orphan Asylum, Albany, exhibited Early June peas, Turnip beets, some beautiful heads of Silesian lettuce, fine double curled parsley, six heads of fine white celery, and some white-spine cucumbers. The committee recommend that a discretionary premium be allowed Mr. Kiesel, for his parsley, beets, cucumbers, and peas, which were very fine. James Wilson exhibited six stems of Hybrid rhubarb, which weighed six pounds.

The committee have awarded the premiums as follows:—On Beets, to E. P. Prentice, \$1 00. On Cabbage, to D. T. Vail, \$1 00. On Cauliflowers, to V. P. Douw, \$1 00. On Celery, to F. Kiesel, of Albany, \$1 00. On Cucumbers, to V. P. Douw, \$1 00. On Lettuce, to F. Kiesel, of Albany, \$1 00. On Peas, to V. P. Douw, \$1 00. On Rhubarb, to James Wilson, \$1 00.—*C. N. Bement, Chairman.*

Pomological Convention.—In a late number we gave notice of the annual exhibition of the New York State Agricultural Society, which is to be held at Buffalo, on the 5th of September next, and also, that a convention of Pomologists would be held at or about the same time. Since then, we have received the following circular:—SIR,—The executive committee of the New York State Agricultural Society, have called a Pomological convention, to be held in this city, on Friday, the 1st day of September next, at 10 o'clock A. M., so as briefly to anticipate the annual fair; and have

done me the honor to devolve upon me the privilege of calling the attention of gentlemen, distinguished for zeal and research in our pursuits, to the proposed convention.

The great objects of the convention, apart from general discussion, are to identify synonymes, to correct errors in the names of our fruits, and to establish an uniform nomenclature. It is very desirable that specimens of all new seedlings should be produced. We have reason to anticipate a very full attendance, and the sessions of the convention will probably be continued through the fair.

It gives me great pleasure to invite you specially to add to the interest of this novel assemblage, by your presence, and participation, and, in behalf of all the members of our Horticultural Society, as well as for myself, I assure you that it will yield us the sincerest pleasure to extend to you and to your friends, all the attentions in our power to bestow; and I respectfully request you to extend this invitation and assurance to any gentlemen of similar taste, in your vicinity, who, through my want of a more extended acquaintance with the votaries of Pomona, may possibly be overlooked. — *With high respect, your obedient servant, W. R. Coppock, President Buffalo Horticultural Society. Buffalo, May 3, 1848.*

N. B. Gentlemen arriving, are requested to inquire for Prof. COPPOCK, at the American Hotel Reading Rooms, between the hours of 9 and 10 o'clock in the forenoon.

Since the New York State Society has decided upon a convention, and given notice in all the agricultural journals, of the time of meeting, some individuals have proposed to hold another at New York, in October, probably with a view to carry out their own designs, knowing that, at Buffalo, they would have but little influence; the State Society being determined to act in an impartial manner, as it has already done in regard to the pomological rules lately passed at their meeting at Albany. We trust that all pomologists will discountenance this attempt to divide the interests of cultivators, and that the polite invitation of Prof. Coppock in behalf of the Buffalo Horticultural Society, will be very generally accepted.—*Ed.*

ART. II. *Massachusetts Horticultural Society.*

Saturday, June 3d, 1848.—An adjourned meeting of the Society was held to-day,—the President in the chair.

[The account of this meeting not having been received in season for this number, it will appear in our next.]

Exhibited.—**FLOWERS:** From the President of the Society, two new varieties of Tree pæonies, *phœnicea plèna* and *rosa supérba*, hardy azaleas, spiræas, &c. From M. Tidd, Woburn, a seedling *Epiphyllum* raised from *E. Ackermánii* and *Cereus speciosissimus*, a large fine flower. From J. Quant, six plants in pots. From Messrs. Winships, hawthorns, azaleas, pæonies, and a great variety of other cut flowers.

From Messrs. Hovey & Co., twelve plants of pelargoniums, as follows :—Beck's Aurora, Orion, Marc Anthony, Isabella, Mustee, Zanzummin, Dea-demonia, Gigantic, Hebe's Lip, Rosy Circle, Drury's Pearl, and Celestial. Bouquets, cut flowers, &c., from Messrs. Breck & Co., W. Kenrick, John Cadness, T. Needham, J. A. Kenrick, Jas Nugent, A. Bowditch, Joseph Stetson, and others.

Premiums were awarded as follows :—

PLANTS IN POTS.—To John Quant, for the best six, \$2.

BOUQUETS.—To Jas Nugent, for the best *vase* bouquet, \$2.

To A. Bowditch, for the second best, \$1.

To W. Quant, for the best pair of *mantel* bouquets, \$2.

To Messrs. Winships, for the second best, \$1.

HAWTHORNS.—To Messrs. Winships, for the best display, \$3.

To J. A. Kenrick, for the second best, \$2. (Omitted last week.)

FRUIT :—From Messrs. Ellwanger & Barry, Rochester, New York, Northern Spy apples, very fine specimens. They fully maintained the high character of this apple as being the very best late keeper. Winter Sweet apples from J. B. Moore, Concord, by Messrs. Hovey & Co. From J. F. Allen, nine varieties of grapes, some of the specimens fine.

VEGETABLES.—From Josiah Lovett, 2d, Victoria Rhubarb, 12 stalks, weighing 21 lbs. ; Seedling Rhubarb of 1847, superior to any exhibited, 3 stalks weighing 7 lbs ; also seedling Rhubarb of 1848, fine. From J. L. L. F. Warren, Victoria Rhubarb. From John Kenrick, Victoria Rhubarb, 12 stalks weighing 18 lbs. 4 oz.

June 10th.—*Exhibited*.—FLOWERS: From Messrs. Winships, a great quantity of cut flowers of shrubs and herbaceous plants, including some fine hardy azaleas ; also two large bouquets. From John Cadness, eight plants in pots, and a variety of cut flowers. From John Kenrick, beautiful specimens of hardy azaleas, laburnums, &c.

From Messrs. Hovey & Co., cut flowers of Beck's pelargoniums, rhododendrons, *Pædonia Pötsii*, and other new varieties. From W. Quant, six plants in pots. Cut flowers, bouquets, &c., from Messrs. Breck & Co., W. Mellar, Jas. Nugent, S. Dike, S. Walker, A. Bowditch, John Duncklee, W. Kenrick, Miss Russell, and others.

Premiums were awarded as follows :—

PLANTS IN POTS.—To W. Quant, for the best six, \$2.

To John Cadness, for the second best, \$1.

BOUQUETS.—To Jas Nugent, for the best *vase* bouquet, \$2.

To A. Bowditch, for the second best, \$1.

To Messrs. Winships, for the best *mantel* bouquet, \$2.

To W. Mellar, for the second best, \$1.

GRATUITIES.—To John Cadness, for rare plants, \$2.

To Miss Russell, for a large bouquet, \$2.

FRUIT.—From J. F. Allen, White Frontignan, Black Hamburg, Grizzly Frontignan, (fine and well colored,) and Zinfindal grapes ; also Black Fig of St. Michael, fine and well ripened. From N. Stetson, Bridgewater, Brunswick figs, very large. From J. Owen, handsome Boston Pine strawberries.

VEGETABLES.—From W. Quant, fine lettuce. From A. D. Williams, rhubarb.

June 17th.—An adjourned meeting of the Society was held to-day,—the President in the chair.

No business coming before the meeting, it was adjourned one week to 24th.

Exhibited.—**FLOWERS:** The show of pæonies to-day for premium was remarkably fine : more new kinds were contributed than were ever shown before, and some of them were surpassingly beautiful ; we may particularly note *P. var. fêstiva*, *sulphûrea*, and *Reine Hortense*.

From the President of the Society, twenty varieties of pæonies, viz. :—*álba grandiflôra*, *tricolor grandiflôra*, *triûmphans*, *Buckyii*, *Duchesse de Nemours*, *Victoire Modeste*, *prolifera tricolor*, *sulphûrea*, *formôsa*, *rôsea*, *albiflôra*, *Póttssii*, *plenissima variegâta*, *Queen Victoria*, *Reine de France*, &c., all fine ; also hardy roses in variety. From Hon. J. S. Cabot, Salem, twelve varieties of superb pæonies, embracing *Queen Victoria*, *Reine Hortense*, *tricolor*, *Victoire Modeste*, *Ree'vesii*, *Duchesse de Nemours*, *papaveræflora*, *elegantissima*, *anemoneflora*, *sulphûrea*, *élegans*, *formôsa*, seedlings, &c.

From Messrs. Hovey & Co., twelve varieties of pæonies, viz. :—*fêstiva*, *papaveræflora*, *speciôsa striâta*, *Victoire Modeste*, *anemoneflora álba*, *Póttssii*, *Ree'vesii*, *Hûmei*, &c. &c. ; also new crimson Boursault, Red Boursault, La Reine, and Persian Yellow roses, *Phlox Van Houtteii*, pansies, carnations, &c. &c. From J. Breck & Co., fine hardy roses, and a great variety of cut flowers. From Messrs. Winships, hardy, perpetual, moss, and other roses, a great quantity of cut flowers, and two elegant bouquets. From J. Cadness, six plants in pots, and five species of *Echinocactus*, very pretty ; also roses, pinks, bouquets, &c. From W. Quant, a superb specimen of the delicate and fragrant *Stephanôtus floribûnda*, a large plant, trained to a balloon trellis, and quite covering it. From J. Quant, six plants in pots. From N. Stetson, Esq., a pretty specimen of *Crássula variegâta*, in fine bloom. From Miss S. W. McClean, a pretty picotee in full bloom, grown in Boston in the parlor. From A. Aspinwall, a splendid show of roses. Bouquets, pæonies, cut flowers, &c., from S. Walker, J. A. Kenrick, Mary M. Kenrick, W. E. Carter, W. Mellar, Jas. Nugent, A. Bowditch, and John Quant.

Premiums were awarded as follows :—

PLANTS IN POTS.—To J. Cadness, for the best six, \$2.

No second premium awarded.

PÆONIES.—To J. S. Cabot, for the best six varieties, \$5.

To Hovey & Co., for the second best six varieties, \$4.

To Joseph Breck & Co., for the best display, \$3.

BOUQUETS.—To Messrs. Winships, for the best pair of *mantel* bouquets, \$2.

To Miss Russell, for the second best, \$1.

To William Quant, for the best *vase* bouquet, \$2.

To J. Nugent, for the second best, \$1.

GRATUITIES.—To M. P. Wilder, for a display of 20 varieties of pæonies, \$5.

To W. Kenrick, for a fine display of pæonies, \$2.

To W. Quant, for a beautiful specimen of *Stephanòtus floribunda*, \$3.

To John Quant, for a pretty specimen of *Buddleya Lindleyana*, \$1.

To Miss S. W. McClean, for a picotee grown in the parlor, \$1.

June 24th.—An adjourned meeting of the Society was held to-day—the President in the chair.

No business coming before the meeting,—it was adjourned one week, to July 1.

Exhibited.—FLOWERS: The exhibition of roses for premium took place to-day, and a splendid display was made; all the stands were completely filled with cut flowers, containing in all more than five hundred varieties. The number of exhibitors was numerous, and the specimens fine.

From the President of the Society, a large quantity of cut roses, including some beautiful specimens of *Solitaire*, *Cloth of Gold*, *Elizé Sauvage*, &c. Roses in fine variety were also shown, by Messrs. Breck & Co., A. Aspinwall, Winships, J. A. Kenrick, W. Kenrick, A. Bowditch, John Cadness, E. Wight, B. V. French, S. Walker, W. Mellar, F. W. Macondry, P. Barnes, and others. Fine pinks were exhibited by Messrs. Breck & Co. and W. Mellar. From J. Cadness six plants in pots. Bouquets, cut flowers, &c., were exhibited by Messrs. Winships, Nugent, Cadness, Bowditch, Mellar, S. Dike, and Miss Russell, and others.

Messrs. Hovey & Co. exhibited upwards of three hundred varieties of roses, embracing thirty superb named ones, as follows:—*Gallica*—Bizarre Marbree, Cyntie, Carangeon, Madame Henriette, Reine Ne me Surpasse, Superb Cramoise, Tibulle, Gil Blas, Nestor, Amiable Queen, Avenant, Boula de Nanteuil, Sir W. Scott, Ponctué: *Hybrid Provence*—Melanie, Aspasie, Blanche fleur, La Ville de Londres: *Hybrid China*—Leopold de Bauffremont, Lord Keith, Le Meteor, Chenédolé, Chas. Louis, No. 1, Coupé d'Hebe, George IV., Madame Plantier, Paul Perras, Ernest Ferray: *Alba*—Sophie de Marsilly; also, nine varieties of prairie roses, viz., Queen, Baltimore Belle, Jane, Milledgeville, Pallida, Pride of Washington, Superba, Perpetual Pink, and Caradori Allen; twelve varieties of moss roses, and fifteen varieties of hybrid perpetuals.

Premiums were awarded as follows:—

HARDY ROSES—in classes.

Class I.

For the best thirty distinct varieties to A. Aspinwall, \$8.

For the second best, to Hovey & Co., \$6.

For the third best, to J. Cadness, \$4.

For the best display, to A. Aspinwall, \$3.

Class II.

For the best 12 varieties, to Joseph Breck & Co., \$5.

Class III.

For the best 12 varieties of hardy perpetual roses, to Hovey & Co., \$5.

For the second best, to A. Aspinwall, \$4.

Class IV.

For the best display of prairie roses, not less than four varieties, to Messrs. Winships, \$4.

For the second best, to Hovey & Co., \$3.

PLANTS IN POTS.—For the best six, to John Cadness, \$2.

PINKS.—For the best six varieties, to W. Mellor, \$4.

For the second best, to Joseph Breck & Co., \$3.

For the best display, to W. Mellor, \$2.

BOUQUETS.—For the best pair of *mantel* bouquets, to Messrs. Winships, \$2.

For the second best, to W. Mellor, \$1.

For the best pair of *vase* bouquets, to John Cadness, \$2.

For the second best, to J. Nugent, \$1.

GRATUITIES.—To M. P. Wilder, for a fine display of roses, \$6.

To Miss Russell, for a basket of flowers, \$1.

FRUIT.—The exhibition of strawberries was one of the finest ever witnessed in the hall, and we think we may truly say, the most magnificent ever seen any where. There was, at least, *one hundred quarts* upon the table, mostly Hovey's Seedling. From Otis Johnson, three large baskets of Hovey's Seedling, of superior quality. From John Owen, two baskets Boston Pine, one of Hovey's Seedling, and Mulberry Strawberries. From Josiah Richardson, Hovey's Seedling, Boston Pine, and 3 seedlings, Nos. 1, 3, and 5. From A. Aspinwall, Hovey's Seedling, very fine. From Isaac Fay, Hovey's Seedling and Fay's Seedling. From A. D. Rogers, Salem, Hovey's Seedling. From Mrs. Spaulding, South Reading, Hovey's Seedling. From A. Bowditch, Hovey's Seedling. From S. Turner, Roxbury, Hovey's Seedling. From N. Stetson, Boston Pine, and Hovey's Seedling. From Capt. Macondry, Early Virginia and Wiley's Seedling. From J. L. L. F. Warren, Red and White Wood Strawberries. From Hovey & Co., one large basket of Hovey's Seedling, one of Boston Pine, and boxes of Alice Maude and Ross's Phoenix. The largest specimens this year were not so heavy as last season, *six* only weighing 3 ounces, 17 grains; these were from Mr. Johnson's basket; *six* berries in 1847, weighed 3½ ounces.

From J. F. Allen, twenty varieties of grapes, among which we noticed clusters of Tottenham Park Muscat, Muscat Blanc Hatif, Black Hamburg, Grizzly Frontignan, Black Tripoli, and others; also, Elton cherries, (forced,) Black Figs, and a variety without name. From N. Stetson, Brunswick(!) figs. From O. N. Towne, Black Prince grapes. From A. Bowditch, Black Hamburg and White Chasselas grapes. From E. Burne, gardener to S. Bigelow, Brighton, Black Hamburg grapes from young vines planted last June. From O. Johnson, Coolidge's Favorite peaches, of remarkable size and beauty.

VEGETABLES: From Thomas Needham, a pair of Walker's Prize cucumbers. From A. D. Williams, cauliflowers. From J. F. Allen, tomatoes.

ART. III. Retrospective Criticism.

Aberdeen Beehive Strawberry.—(p. 282.)—If your correspondent, W. R. P., would write less, and bestow more reflection upon the subjects he presumes to discuss, his liability to the charge of presumption would be less, and his opinions would not so frequently conflict, sometimes even on the same page, as is the case in the June number of your magazine, pp. 282 and 283, and they might have more weight with the community. It is an even chance that he has not yet seen a plant of the Aberdeen Beehive Strawberry, yet boldly pronounces it *staminate*, and therefore but little can be expected from it; and while, in one communication, under the above head, he appears to condemn *all staminate varieties as trash*, in an immediately succeeding article he proclaims his acceptance of the challenge offered by Mr. N. Longworth for a productive *staminate* variety, which he states *may* be produced on *our own soil*, as exemplified in *his new seedlings*, and more especially those from the “Montevideo Pine,” to which he calls special attention; and it would appear that *his seedling varieties* are exceptions to what he considers a general rule. If, by *staminate plants*, is meant a deficiency of the female or a great preponderance of the male organs, then I do not consider the Aberdeen Beehive Strawberry to be correctly termed a *staminate variety*; but if the blossom shows any stamens at all, it is to be denominated *staminate*, then it certainly is such. It appears to be perfect in the development of its floral organs,—that is, hermaphrodite, the stamens and pistils being duly proportioned. The stamens are small, rising a little above the pistils, throughout which they are interspersed; and so far forth as the most perfect hermaphrodite blossoms of any variety of fruit may be expected to set, this strawberry may be said to give fair indications of such promise. It is not pretended that a perfect judgment has been formed, for the plants examined have not been long imported; they are weak, have produced but few blossoms, and these were removed to give strength to the plants for increase. I presume it will not be contended, that every blossom of a pistillate variety of strawberry will perfect fruit. Your correspondent modestly proclaims, (and this appears to be the real object of his communication,) “that there does not exist on the earth a collection of strawberries presenting any comparison to my (his) present one, and that those who will inspect it will wonder that they should have been misled by cultivating the trash sent out from Europe, with high-sounding names, during the last ten years, when such superior varieties can be produced on our own soil.” *Misled by cultivating the trash?* By whom? Tell it not in Gath, that *your correspondent himself* has more than any body else, on this side of the Atlantic, helped to mislead cultivators, *by highly commending in his catalogues and selling such foreign trash*. Hear him speak at page 47 of his catalogue, for 1845:—“The proprietors have, in connection with G. W. H——n, Esq., secretary of the Horticultural Society, investigated with great care the relative merits of the different varieties of strawberries, and the inferior and barren kinds have been

rejected. The present collection forms the climax to which this favorite fruit has attained, and all are true and correct as described." Are we not told here that the merits of the list of strawberries, then offered for sale, had been "*investigated with great care*," and that all were "*as described*?" Was not the "British Queen," described as of "*first quality, monstrous size, and greatly esteemed*?" Yet now it is "*trash*," and our "transatlantic friends" are desired to bestow upon us no more such favors. Is not this correspondent of yours the climax of humbug? Surely, as you have said, "to condemn the Beehive because it is staminate, is perfectly absurd."

Your correspondent has *highly eulogized* what he chooses to call the "Montevideo Pine" strawberry. This is an old and *staminate* variety, (therefore worthless by his own testimony,) "*Turner's Pine*," cultivated by your correspondent for some years, originally called by *this* name in his catalogues, shown by *this* name in his grounds, and subsequently exhibited as *Turner's Pine*, with Montevideo Pine as a *synonyme*, before the late Queen's County Horticultural Society. Not only has W. R. P. changed a *proper* name, recognized as such by the London Horticultural Society, but he has undertaken to form a class of strawberries as "*Montevideo Pines*," though upon what authority, or botanical principles, he does not venture to explain. In England, where Turner's Pine originated, it was ranked as *second* quality, and is now, I believe, altogether discarded from cultivation. The plant is *highly staminate*, (*trash* of course,) and a very poor bearer, which may perhaps account for its *scarcity* in European collections. In appearance, it is attractive, foliage large, footstalks of the leaves very strong and downy, readily distinguishing it from other varieties. The blossoms are very large, so is the fruit; in shape conical, flavor good. W. R. P. has cultivated his so-called "*Montevideo Pines*" for nearly five years, and has as yet sold only few, if any, of the plants, still I doubt much if, with all *his* skill and care bestowed upon them, he has any more plants *now* of the original variety than he had when he began. Though the plants appear very vigorous, they make comparatively but few runners; most of these our winter kills, and the old plants die off in spite of every care. The design of Mr. Prince's communications to the horticultural periodicals, does not appear to be the promulgation of useful facts or information, but to puff his goods at the expense both of the proprietors and readers thereof; and it is to be hoped that his seedlings will prove better than their parent, for, if they are not, the public will have again been most sadly *mised* by "*high-sounding names*" and exaggerated statements.

As the soil and climate of Europe may be as unfavorable to the cultivation of American, as our soil and climate are to many European varieties of strawberries, it is to be desired that, for the common reputation of the country, as well as that of Mr. P., the persons in Europe, who have ordered these new and superior varieties of American strawberries, may not be disappointed in the expectations they may have formed of their estimable qualities, from Mr. P.'s descriptive catalogue, as is stated by that eminent French nurseryman, Mons. Vibert, to have been the case with varieties of our *native grapes*, which, however valuable in their native

woods, and however costly to procure, were in France deemed mere *trash*, and totally unworthy cultivation, notwithstanding they had "high-sounding" or Indian names. (See Mons. Vibert's pamphlet entitled, "*Avis du Commerce*.") Mons. V. thinks he was regularly humbugged. Difference of soil and climate, however, or the want of taste in Frenchmen, may offer some explanation of the mystery; for true it is they could not appreciate the high aroma, thick skin, and substantial pulp of these remarkable grapes from Texas and elsewhere. "Thereby hangs a tale."—*A Subscriber, Flushing, L. I., June 20, 1848.*

ART. IV. *Answers to Correspondents.*

PELAGONIUMS FOR EXHIBITION. *An Amateur.*—If you wish to be a successful competitor, you *must* procure some of the new varieties; there is no chance of competing *successfully* unless you do. If you procure the following six, you need not fear to compete with any person, provided you grow the plants well:—Beck's Aurora, Desdemona, Rosy Circle, and Hebe's Lip, Foster's Orion, and Drury's Pearl; if twelve, add the following:—Beck's Competitor, Arabella, Mustee, Bacchus, and Isabella and Celestial. Nearly all these were in the four stands which were awarded the highest prizes in London at the May exhibitions, as will be seen in a previous page.

LAYING CARNATIONS. *J. C. W.*—The moment the blooms are past their prime, the young shoots should be layered; this is easily done by earthing up around the root, and pegging down the shoots, after making a longitudinal slit about an inch in length.

PRIZE DAHLIAS. *B.*—Some of the newer ones in the catalogues have not been grown here so as to form an opinion; but, according to the exhibitions in England, the following 12 obtained the number of prizes against their names last year:—

Andromeda, *buff*, 7; Berryer, *maroon*, 21; Cassandra, *ruby crimson*, 14; Lady of the Lake, *crimson tipped*, 14; Louis Philippe, *crimson*, 24; Marquis of Worcester, *crimson tipped*, 13; Minn, *rosy crimson*, 12; Miss Vyse, *rose tipped*, 29; Scarlet Gem, *scarlet*, 20; Star, *crimson tipped*, 10; Victorine, *lilac*, 8; Yellow Standard, *yellow*, 19.

If you have all these, by giving them good attention, abundant waterings, &c., you will probably be able to show twelve of the very finest flowers.

HERBACEOUS PERENNIALS. *A lover of Hardy flowers.*—We agree with you, that not sufficient attention is given to the hardy herbaceous plants; the little care they require, and the abundance of bloom they furnish, are sufficient to render them indispensable in every garden. There is yet abundance of time to get many of the newest and best, as nurserymen keep them in pots, and they can be immediately turned out into the open air, where, if they do not bloom very strong, they will make fine plants for flowering next year.

HORTICULTURAL MEMORANDA

FOR JULY.

FRUIT DEPARTMENT.

Grape Vines, in the greenhouse, will now be coloring and maturing their fruit, and will require abundant supplies of air, betimes in the morning, and left on rather later than last month; in very warm nights, when the berries are evenly colored, the sashes may remain open both day and night. For the first week or two, damping the house, both morning and evening, may be continued, which will aid in swelling up the fruit, but, after that time, it may be discontinued altogether. All the laterals should be stopped back as fast as they push, and any leaves which chafe the bunches should be cut off so as not to injure the bloom,—the greatest beauty of a well-grown grape. If the weather should prove very dry, one good watering now will be of great service to the vines. Grapes in the cold house will require the same treatment as directed last month for grapes in the greenhouse. If the red spider appears, fumigate immediately with sulphur. New graperies may yet be planted with perfect success. Vines in the open air should have all shoots not wanted for next year, stopped *two eyes* beyond the fruit.

Strauberry beds will now need some attention. As soon as the fruit is all gathered, the spaces between the rows should be dug, and all the runners laid in at regular distances, clipping off the weak ones. Old beds should be cut through with the spade and the old plants turned under, in order that the young runners may take their place.

Summer pruning should still be continued; in a previous page, we have given the views of Mr. Thompson on this mode of pruning, so well known among the French gardeners, but very little practised among our cultivators.

Budding may be commenced the last of this month, beginning with the cherry, pear, and plum trees.

FLOWER DEPARTMENT.

Camellias now having ripened their wood, repotting may be performed this month with the best success; but, as we have given ample directions for this in a previous page, we must refer the amateur to that article, page 301.

Pelargoniums must be headed down this month, and the cuttings put in; cut well in or the plants will not break strong. Keep rather dry for two weeks after they are headed down.

Fuchsias, intended for fine specimens, should be shifted into *ten-inch* pots, and be liberally supplied with liquid guano.

Roses, in pots, intended for early flowering in the autumn, should be plunged in an open, airy situation, where they will ripen their wood, mulching the surface with coarse manure. Hardy roses may now be propagated by layers, and by budding; the Chinese, teas and noisettes may be also increased by layers and by cuttings. Prairie roses should have the old wood cut away after they have done flowering, so as to encourage the new shoots; for the best flowers are produced on these; they may be propagated by layers.

Carnations, picotees, and pinks, should be layered this month.

Tulips and hyacinths should be taken up this month.

Oxalis hirta should be potted the last of the month.

Euphorbia Jacquinaeflora should be repotted now, if not already done.

Azalea cuttings put in, in May, should now be potted off; old plants, if making a rapid growth, should have all the strong shoots stopped in order to make them bushy plants.

Cinerarias and calceolaria seeds should be sown this month in order to get good strong plants for next spring.

Dahlias should have attention; stake and tie up all the plants; keep the earth stirred about the roots, and mulch with coarse manure; water liberally if dry weather.

Verbenas for early flowering in winter should now be propagated by layers or cuttings.

Perennial flowering plants of many kinds may now be raised from seeds, and if the young plants are carefully transplanted in August, they will bloom finely next year.

Cactuses should now be well watered in order to secure a vigorous growth.

Gloxinias and Achimenes.—A fine bloom may be kept up all the season by now bringing in the young plants, giving them a good shift into six-inch pots.

Orange and Lemon trees may be budded this month.

Neapolitan Violets planted out in frames should be liberally watered in dry weather.

Mignonette and Sweet Alyssum may be planted now to furnish a succession of flowers for the autumn.

Victoria Stock seed should be planted now if good plants are wanted for spring blooming.

Abutilons, both the new and the old one, should now be shifted into larger pots, in order to make good specimens for winter. Old plants should be headed down in order to produce new shoots.

Cyclamens may now be turned on their sides until next month, when they may be repotted. Seeds should be planted now.

Annuals, such as asters, balsams, &c., may be transplanted now, and they will bloom freely.

Portulacas, planted now on circular beds, raised in the centre, will make a splendid show all the season.

Pansy seed should be sown the last of the month, if fine beds are wanted for blooming well in the spring.

Scarlet Geraniums.—Young plants, intended for blooming next winter, should now be shifted into larger pots and plunged in the open grounds or in beds of tan.

Lauristinuses may be repotted now; this is also the season to propagate them by layers or cuttings.

Insects of all kinds should be looked after. Plants infested with the scale should be thoroughly washed; and those infested with the aphid or red spider, syringed with whale oil soap.

THE MAGAZINE OF HORTICULTURE.

AUGUST, 1848.

ORIGINAL COMMUNICATIONS.

ART. I. *Descriptions and Engravings of Select Varieties of Pears.* By the EDITOR.

CONTINUING our descriptions of pears, we present our pomological friends with an account of six American varieties, two of them now for the first time fully described and figured. These are the Oliver's Russet and Shurtleff's Seedling; both fine fruits, especially the former, which has now been before us for three or four years, while the latter is of recent introduction to notice. Agreeably to our remarks, some time since, we shall, as far as possible, keep the American varieties together, and consequently descriptions of some fine new foreign pears are deferred until another opportunity.

97. OLIVER'S RUSSET.

Four or five years since, some fine specimens of a new seedling pear were shown before the Massachusetts Horticultural Society, by Mr. Oliver, of Lynn, in whose garden the tree that produced them was found growing, and they were pronounced by the committee, "nearly equal to the Seckel." This was in the fall of 1843. In our volume for 1844, (X. p. 212,) we gave a brief description of this pear, after having tried the fruit ourselves. Last year, Mr. Oliver again exhibited some fine specimens of this variety, and the committee stated that "it sustains its previous reputation." This opinion, we are happy to say, accords with our own views of this new pear, (*fig.* 32.) It has not quite such an abundant

juice as the Seckel, but it is a rich, spicy, and excellent fruit, and, added to its color, which is a rich cinnamon russet, it is a most desirable addition to any collection of pears.

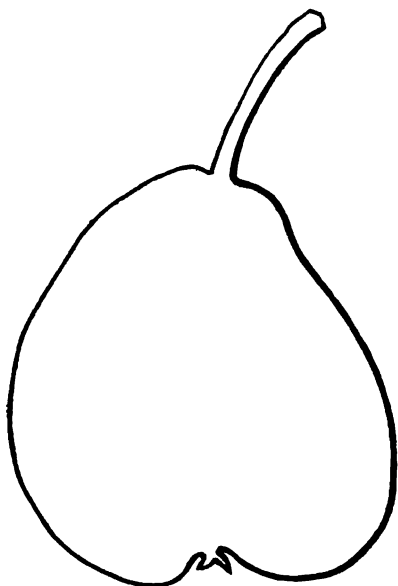


Fig. 32. Oliver's Russet.

The original tree sprung up from seed immediately in the neighborhood of two pear trees,—one of them the old Orange, once such a general favorite, and the other, the Doyenné blanc, or St. Michael; and its appearance indicates such a parentage, having the russet skin of the Orange, with the fine flavor of the Doyenné.

The trees are of erect and vigorous habit, and produce abundantly. The wood is of a deep reddish brown, and the annual shoots are covered with a whitish down; the leaves, which are of a dark dull green, have also somewhat of the mealy appearance of the young shoots. We have not yet ascertained whether it will succeed upon the quince.

Size, medium, about two and a quarter inches long, and two in diameter: *Form*, obovate, full at the crown, and tapering to the stem end, which is obtuse: *Skin*, fair, slightly rough, with a yellow ground, nearly or quite covered with a

rather smooth, rich, deep cinnamon russet, reddish on the sunny side: *Stem*, medium length, about one inch long, rather slender, and obliquely inserted in a very shallow cavity: *Eye*, small, open, and little depressed in a small shallow basin; segments of the calyx short, connected, reflexed: *Flesh*, yellowish, coarse, melting, and juicy: *Flavor*, rich, sugary, and excellent, with a pleasant aroma: *Core*, medium size: *Seeds*, medium size. Ripe in October.

98. BLEEKER'S MEADOW. Prince's *Pom. Manual*, II. p. 215.

Meadow Pear. *Pom. Manual*.

There are various opinions respecting the quality of this native pear, (*fig. 33.*) When first introduced to notice, it

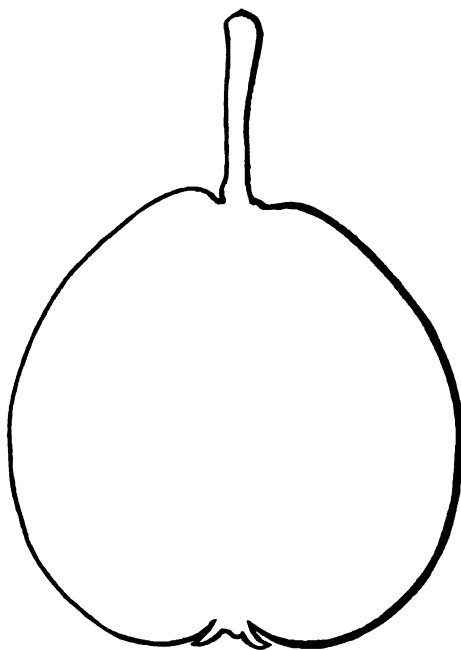


Fig. 33. Bleeker's Meadow.

was said to be equal to the Seckel; this, however, has not been realized, but, in some soils and situations, it is considered an excellent pear. Last autumn, an amateur cultivator sent us

several specimens of a pear, which he found growing in a garden, in western New York, and which he supposed to be a new variety, at the same time requesting us to inform him if the pear was known around Boston. We immediately informed him it was the well known Bleeker's Meadow. In reply he stated, that, "whether the *old* Bleeker's Meadow or not, it was a variety which he considered much superior to many kinds, cultivated as first-rate fruits." It is of handsome appearance, with a high musky flavor, perhaps too much so for some tastes; but, if the flesh was more melting, it would be a very fine pear. The tree is of the most vigorous habit, with erect branches, attaining a large size in a few years; and, in consequence of this, it is made use of as a stock on which to engraft slender growing kinds. It is also an abundant bearer, after it once begins to produce fruit.

The Bleeker's Meadow originated in Pennsylvania, and is stated to have been raised from the Seckel. It was first brought to notice by the late William Prince, of Flushing, L. I. Wood, dull dark ashy gray.

Size, medium, about two and a half inches long, and two and a half in diameter: *Form*, roundish obovate, largest in the middle, tapering little to the stem: *Skin*, fair, smooth, pale yellow when mature, very regularly covered with round russet specks, and dotted with crimson on the sunny side: *Stem*, medium length, about one inch, slender, straight, and obliquely inserted without any cavity: *Eye*, large, open, and scarcely depressed below the surface of the crown; segments of the calyx short, roundish, quite reflexed: *Flesh*, white, coarse, rather crisp and juicy: *Flavor*, brisk and sugary, with a strong musky perfume: *Core*, large: *Seeds*, rather large, pale brown. Ripe in November, and keeps some time.

99. SURPASSE VIRGOULOUSE. *Book of Fruits*, 1st Ed. No. 36.

Surpasse Virgalieu. *Fruits and Fruit Trees of America.*

Perhaps we are in error in classing this among our American varieties of pears; but the best evidence that it is so, is, that of four or five hundred kinds received by the late Mr. Manning, from various sources in England and France, and which have produced fruit in the Pomological Garden, the

Surpasse Virgoulouse has not been detected among the number, nor, so far as we can learn, has it been described by any European pomologist. It was first disseminated by the late André Parmetier, from his collection at Brooklyn, N. Y., and produced fruit with Mr. Manning, who first briefly noticed it in our magazine, (Vol. III., p. 49.) He considered it "decidedly first-rate."

Our drawing (*fig. 34.*) is from a fine specimen, from the collection of the Hon. J. S. Cabot, of Salem. We have also had it from other sources, and we have found it a delicious

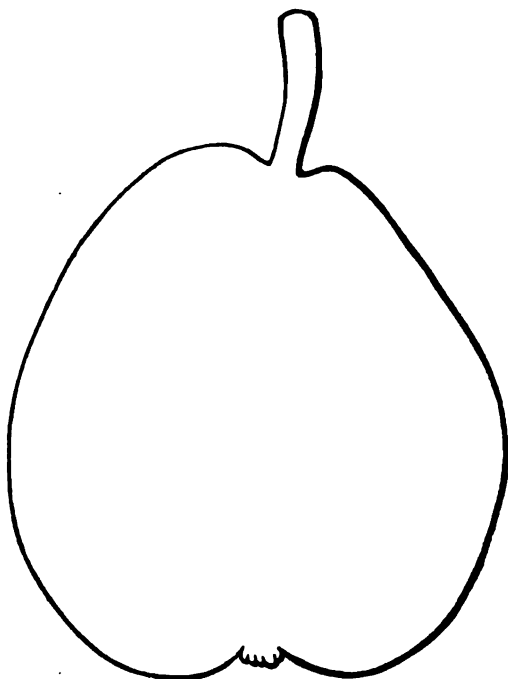


Fig. 34. Surpasse Virgoulouse.

variety, equalling the old Doyenné. The trees are vigorous and healthy, producing regular crops, and it may be set down as a fine addition to any collection. Wood, yellowish of upright growth.

Size, large, about three inches and a half long, and three and a quarter in diameter: *Form*, oblong obovate, regular, full at the crown, little contracted in the middle, and obtuse

at the stem: *Skin*, fair, smooth, pale lemon yellow, when mature, occasionally tinged with pale blush on the sunny side, and covered with small russet specks: *Stem*, medium length, about one inch long, rather slender, curved, and inserted in a small, moderately deep cavity, highest on one side: *Eye*, medium size, open, and little depressed in a rather shallow basin; segments of the calyx short, rounded: *Flesh*, yellowish white, fine, melting, and juicy: *Flavor*, rich, sprightly, sugary, perfumed, and delicious: *Core*, large: *Seeds*, large, long, and pointed. Ripe in October.

100. CAPSHEAF. *New American Orchardist.*

The Capsheaf (*fig. 35*,) is a native of Rhode Island, and, like the Buffum, Fulton, and other of our native fruits, while they cannot attain to the rank of first-rate pears, their hardi-

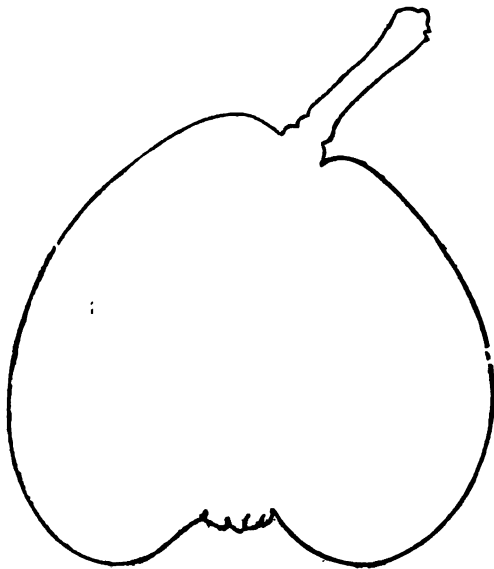


Fig. 35. Capsheaf.

ness and adaptation to our climate, and their vigorous growth and abundant produce, render them desirable varieties in all large collections. They can always be relied upon for a good crop, while many of the choicest foreign varieties are so uncertain that they often disappoint the hopes of the

impatient amateur. Mr. Manning thought it "entitled to cultivation as an excellent market fruit." (Vol. III. p. 52.) Wood yellowish.

Size, medium, about two and a half inches long, and two and a half in diameter: *Form*, roundish obovate, large at the crown, tapering in a swollen manner to the stem: *Skin*, fair, nearly smooth, pale yellow, nearly covered with light cinnamon russet, darkest on the sunny side: *Stem*, short, about three quarters of an inch long, smooth, fleshy, and wrinkled where it adjoins the fruit, and obliquely inserted in a broad shallow cavity: *Eye*, medium size, closed, and moderately sunk in a large, open, slightly furrowed basin; segments of the calyx medium length, broad and pointed: *Flesh*, yellowish white, fine, melting, and juicy: *Flavor*, pleasant, sweet, and good, with a slight perfume: *Core*, large: *Seeds*, medium size, pale brown. Ripe in October.

101. SHURTLEFF'S SEEDLING.

This is a new pear raised by Dr. S. A. Shurtleff, formerly of Boston, but now of Roxbury. The original tree sprung up in the garden, attached to his residence on Pemberton Hill, and, when that was levelled to make room for blocks of stores and dwellings, the young tree, with others, was removed to Roxbury. The tree is now thirteen years old, and twenty feet high, and has only borne fruit for two or three years. It is a most vigorous grower, of handsome form, and an abundant bearer.

Specimens of this variety (*fig. 36*,) were sent us last fall by Dr. Shurtleff. In general appearance, it greatly resembles the Gansell's Bergamot, (figured and described at page 200,) and, although we are without information as to its origin, we should think it might have been produced from that variety. It appears to be a pear well worthy of general cultivation.

Size, medium, about two and a quarter inches long, and two and a quarter in diameter: *Form*, roundish, somewhat flattened at the base, and tapering little towards the stem, where it ends obtusely: *Skin*, fair, slightly rough, dull greenish yellow, thickly russeted around the stem, rather

broadly marked with dark red in the sun, and minutely dotted all over with russet specks : *Stem*, rather long, about one and a quarter inches in length, moderately stout, curved,

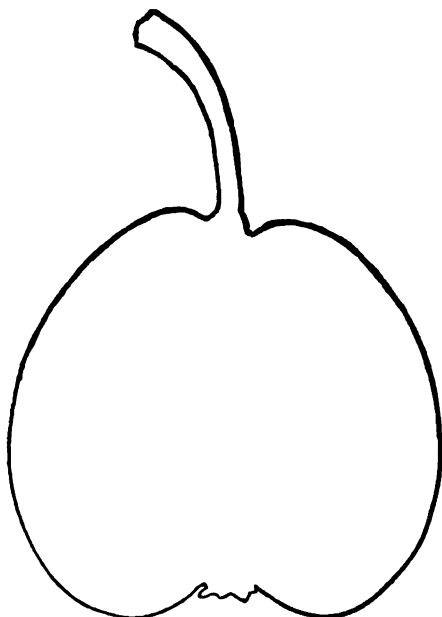


Fig. 36. Shurtleff's Seedling.

swollen at the base, and inserted in a small shallow cavity : *Eye*, rather large, open, and little sunk in a broad open shallow basin ; segments of the calyx short and rounded : *Flesh*, white, coarse, melting, and juicy, with a slight grit at the core : *Flavor*, rich, brisk, and pleasantly perfumed : *Core*, large : *Seeds*, medium size. Ripe in September.

102. *WILLIAMS'S EARLY. New American Orchardist.*

Williams's Early pear, if it did not come at a season when we have quite a number of varieties of much larger size, would be a very desirable addition to every garden. It possesses a sprightly and refreshing flavor, which renders it a favorite with many cultivators, and its productiveness will claim for it a place in all large collections.

This pear (*fig. 37,*) originated on the farm of Mr. A. D.

Williams, of Roxbury, some years since. Mr. Manning, who was always eager to possess every new and fine fruit, added it to his great collection, and, in a brief account of it, in an

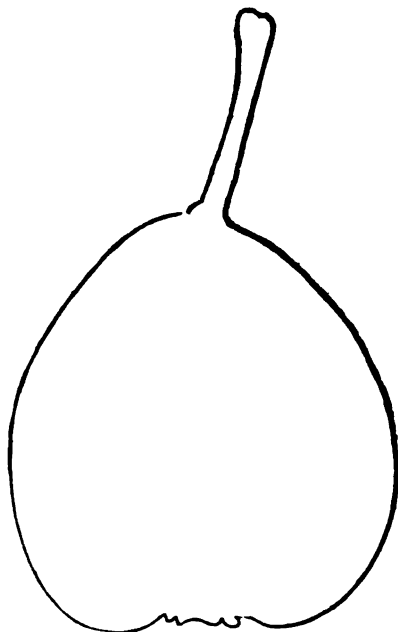


Fig. 37. *Williams's Early.*

excellent article, in one of the early volumes of our magazine, describing one hundred and twenty-nine varieties of pears, (Vol. III. p. 12,) he states that it "deserves to be placed in the first class of table pears,"—a rank accorded to but few of our American varieties. Wood reddish brown.

Size, medium, about two and a quarter inches long, and two in diameter: *Form*, obovate, largest near the crown, tapering roundly to the stem, where it ends rather obtusely: *Skin*, fair, smooth, light yellow when mature, broadly covered with bright crimson on the sunny side, the base of the stem often encircled with pale russet, and the surface covered with scattered greenish and brown specks: *Stem*, long, about one and a quarter inches, smooth, stout, slightly fleshy at the base, and inserted without any cavity, with a small projection on one side: *Eye*, large, open, and slightly sunk in a

furrowed basin, surrounded with some small projections; segments of the calyx rather short and rounded: *Flesh*, yellowish white, coarse, melting, and juicy: *Flavor*, rich, brisk, sugary and excellent: *Core*, large: *Seeds*, large, dark brown. Ripe in September, and keeps into October.

ART. II. *On the Cultivation of the Balsam.*

IN the climate of England, where the temperature is too low to grow the balsam in the open ground, in perfection, it is extensively cultivated in pots; and there are but few gardens which do not contain quite a number of plants, either for the decoration of the conservatory or the greenhouse. Properly managed, they form very splendid objects, often attaining the height of three feet and eight or ten feet in circumference, their numerous stems being clothed with flowers the whole length.

In our warm and sunny clime, there is no necessity of resorting to the cultivation of the balsam, in pots, to have them in great splendor. But where there are conservatories or greenhouses of some extent, or when it is desirable to have some striking ornament for the veranda, the balsam, well grown, comes in among the showiest of plants adapted to that object. With the coxcomb, it keeps up the succession of bloom until autumn.

But to bloom the balsam in fine condition requires no little skill and attention; it is, therefore, with pleasure that we copy the following excellent directions, from the *London Horticultural Magazine*, for accomplishing this object. It is now too late to have the finest specimens, but if plants six inches high are immediately taken up and potted, they will make excellent specimens by September.

VERY few persons cultivate this plant with good taste, and too many go to work as if the only object were size. Hence we find, that, in exhibitions where these plants figure, they are very large, the flowers distant, great part of the stem

naked, and the only recommendation belonging to them is the great size of their individual flowers, and the monstrous appearance of the plants themselves. The various colors and shades, the odd way in which many are striped or blotched, and the supposed difficulty of producing them in good order, deter many from pretending to grow them in pots; while the judges at horticultural exhibitions awarding prizes to the largest, instead of the best, is a great discouragement to all but those who persevere in producing monsters, because they are the most likely to win. It has been said, that they will rise four feet, and be fifteen feet round or five feet across. This may be; but the proper way to grow a plant is to have nothing coarse about it, and to keep it in strong condition with good proportion of leaf, stem, and flowers, and let it grow its own way. The properties for a good balsam are:—

First, branches down to the surface of the pot, no bare stem, flowers close together, and foliage among and beyond them. The flowers completely circling the stem on all sides.

Second, the individual flowers large, round, and double.

Third, the petals thick and smooth on the edges.

Fourth, the colors dense, and if blotched or striped, the marks well defined, not running into each other.

Fifth, the plant the same width across as it is high.

These conditions can only be attained by careful and even growing, without great heat, and by carefully avoiding all sudden changes.

SEED, AND SOWING, SOIL, ETC.

It has been said, and we have never been able to contradict it from experience, that the older the seed is the better, and more sure to come double; we have seen it recommended at not less than nine years old. It is said, that cucumber and melon seed cannot be too old, but these are often used the next season; and, if put into the warm pocket after drying, it will be good in a year. We have acted upon this with the balsam, and found it equally beneficial. The only good that keeping can do is, to dry by degrees; and it will be found that wearing in the warm pocket quite loose will

hasten the ripening or rather the drying of the balsam. Sow the seeds in the beginning of March, and again in the beginning of April, in wide-mouthed pots, and in a slight hot-bed, that is to say, the heat not allowed above 60°. When it does exceed this, open it at the back to let some of the heat out, so that it may not get above 60°. In a very short time these seeds will be up, and then air must be freely given, though the heat may not be too great, but it ought not to be allowed to decline below 45°. If they become drawn in the seedling state, it is very difficult to get them right again. As soon as they get a second pair of leaves, they should be carefully transplanted. And here we may say something about the soil to be used from the first to the last. As the best that can be had, we should recommend rotted turves, which have been cut from a loamy rich pasture, and with all the grass fibres and roots decayed in it. This need only be rubbed through a potato sieve; not that we require the earth small, but that it enables us to see any of the troublesome grubs, wire-worms, &c., with which the turf may be infested, and which ought to be caught and killed by hand; for all washes, salts, lime, &c., that might annoy them would alter the character of the soil. By rubbing it through a very coarse sieve, such as the smallest potatoes are sifted through, any large lumps of turf not completely rotted, and also great stones, will be easily taken out and thrown away. If this cannot be got, and clean loam is obliged to be used, half of this added to one fourth turfy peat and leaf-mould mixed, and one fourth decomposed cowdung, will be the next best soil to use; this should by rights lay together some time, and be well mixed together before using; still, rotted leaves are to be preferred, and no florist should be without a compost, which is more valuable than any other.

POTTING.

When the seedlings get their second pair of leaves, take pots of the size called forty-eights, that is to say, forty-eight pots to the cast; and having put crocks one third of the way up, fill the pots with the compost; raise the seedlings in the pots with a piece of flat wood like the blade of a knife, with

as much of the earth as hangs on the roots, and, making allowance for the room it will take, make a hole in the centre of the soil in the pot, thrusting the wood down a little way, and press the soil sideways to open a vacancy; plant the seedling in without disturbing the fibres, and put soil upon it, pressing the soil enough to close the earth about the roots; or fill the pots all but an inch of the top, place the seedling in the centre on the soil, holding it with one hand, while with the other the rest of the soil is put in to fill up the pot, gently pressing it around the sides to prevent the plant from sinking too low, and only covering the roots to the collar; water at the same instant, so that the plant shall not flag a moment. These pots are all to be replaced in the hot-bed, and covered a few hours with a mat, with the frame closed. They must then have a little air daily, and the frame must be sunk or the soil in it raised, so that the plants be near the glass, and all of them near alike; that is to say, not more than three inches from it. They will grow rapidly, want water frequently, and air must be given at the back of the frame, by propping up the light half an inch or an inch according to the heat of the bed.

SHIFTING INTO LARGER POTS.

As soon as the roots reach the sides of the pots, which will be seen by turning out one of the balls occasionally, prepare pots a size larger, viz., thirty-twos, and a few crocks at the bottom of each. As soon as the roots begin to mat, or grow freely on the outside of the ball, and close to the pot, they will be ready for the change. Put as much soil on the crocks as will raise the ball to the surface of the pot, then turn them out, one by one, and, placing them in the centre of the larger pot, fill in the soil all around it, carefully pressing it down the side without damaging the fibres, and levelling the top of the soil nearly up to the edge of the pot, for watering will sink it a little. These must all be returned to the hot-bed, which will be cooler for the work it has done; and, the weather being warmer, it need only be carefully closed in bad weather and of a night, and be well protected with a covering of some kind. Now the frame may require raising,

to prevent the plants from touching the glass; and it is very easy to do this, not only until the bottom edge of it is as high as the soil, but long afterwards; because, by using turves outside it and propping the frame up at the corners, almost any height may be obtained to give the plants room; but it will be well to prepare another bed or a pit, as the plants advance much in height. As the weather becomes warmer, they will only require the natural heat of a greenhouse or pit, and, in the warm part of the day, should have all the air that can be given. When the roots get to the side of the thirty-twos, the plants must be shifted in a similar manner to twenty-fours.

THE BLOOMING.

This is made a very particular job by some people. They will pick off all the first buds; but if the balsam be allowed to grow naturally in the soil we have mentioned, and we keep them near the glass, and shifted, from time to time, from one pot to another, the plants will be better allowed to bloom as they are inclined. They will be short, stout, well proportioned, good-looking plants, from the moment they open a flower until they are in full bloom. All that need be done is, to take off the decayed and decaying flowers, (unless the seed is wanted,) and they will keep in perfection a long time. Some of the plants will not flower until they are in the largest sized pots; but we prefer keeping them in size twenty-four for the largest, and there letting them bloom. They may be wonderful and extraordinary when they attain a large size, but they will never please the man of true taste. The colors are not so brilliant, the flowers are more loose, and the plant becomes less bushy and attractive. But let it not be imagined, that there is any difficulty in growing them large. The only trouble is, that imposed on us by the handling of larger and heavier subjects.

SAVING THE SEED.

The instant you find a balsam opening its flowers, consider whether it is such as you would like seed from, and remove it far from all the rest; when you come to another that is equally desirable, but of a different color, take that to the

first. Let them all be removed to some part of the garden where there is no other of the tribe, and turn them out into the open ground, that they may have all the air, rain, and wind; beyond choosing a sheltered spot, they will require no protection, but, as the seed-pods swell, they will require constant watching, so that as soon as the pods are full-grown they may be gathered and put into a deep vessel of some kind, because when they spring open they send the seed an immense distance, and much of it would be lost if the box or other vessel they were put in were shallow, and so also would it be scattered in all directions if allowed to split or spring open on the plant. The plants for seed will require to be frequently watered, and it would be wrong to put any out for seed except such as have the good qualities we have pointed out, or at least some one or more of them, in a large degree. It is but chancework what we obtain from seed, and there is no way of perpetuating the plant; but the character of seed saved carefully, even of the most sporting annuals, may be greatly improved by proper selection.

GENERAL REMARKS.

All the difference between growing larger plants is, that the larger ones are kept growing fast, with plenty of pot-room, and keeping up the heat, picking off the premature bloom-buds to prevent any check of their growth, and giving a few more shifts from one pot to another.

ART. III. *The Camellia ; its History, Introduction, Propagation, Cultivation, and General Treatment, with a Descriptive List of the finest varieties.* By the EDITOR.

(Continued from page 309.)

CONTINUING our article under the heads detailed in our last number, we commence with

PRUNING THE CAMELLIA.

Few plants bear the knife much more freely than the camellia; but, from a want of the knowledge of this, or a fear

that severe pruning will quite spoil them, they are, in most instances, left to assume the form most natural to each variety. Some make short-jointed, stout wood, and, if not pruned, in a short time become one mass of short branches; others have a straggling and irregular growth, and these, if left unpruned, become ugly-looking specimens; a third kind form very long, upright shoots, and, if left to themselves, would attain the height of ten feet, with scarcely any side branches. Thus it will be noticed, that varieties, varying so much in habit, need pruning, in order to give them symmetry of shape, and at the same time induce them to produce a good supply of flower-buds.

In very extensive collections of camellias, where the stock is large, and where they are crowded together during the winter, many of the plants become what is termed *lean*; that is, they lose most of the leaves on all the lower branches, which, after a while, decay, and, in the place of bushy specimens, they have one main stem with a little tuft of branches at the top. In this state, unless they are needed as standards, to tower up among dwarf plants, they have but little beauty, and, in order to recover them, they need *heading* nearly down to the soil. If well rooted, they soon throw up vigorous shoots, and, selecting out a sufficient number of these to make a good head, the others are rubbed off; with good management, a finely formed compact bush may be obtained in a very short time.

The seasons of pruning are in spring immediately after blooming, before the plants commence growing, or in August, after they have ripened their wood. When pruned in the spring, the plants should be placed in a warm and moist atmosphere, which will cause them to break equally and vigorously; they should be kept well shaded and watered, making free use of the syringe, until the new shoots are well grown. They may then have the same treatment as the other plants.

If the pruning is done in August, the plants will require no particular treatment; they should remain with the other plants in the open air, until the period of removal to the house, as the object is not to start a new growth, which would not mature before winter. They should, however, be repotted. In

the spring, their growth will be more vigorous and rapid than those pruned in March ; and, if healthy plants, will form an abundance of flower-buds for the ensuing winter.

WINTER TREATMENT.

The camellia, although delighting in shade and moisture, is quickly injured by a succession of cold heavy rains. Care should be taken, therefore, that the plants are not exposed to these, which are frequent in the autumn months in our climate. Early in October, preparations should be made for the removal of the plants to their winter quarters. The pots should all be well washed, and the leaves have a thorough syringing in order to clean off as much of the dust as possible. The surface of the soil should also be cleaned of all moss and made level.

The arrangement of the plants should be completed as they are brought in, and, as this will depend upon the size and shape of the house, and the taste of the gardener or proprietor, we can only advise that they should not on any account be crowded together. One hundred plants, well grown, will afford more gratification than twice that number crowded into the same space. They should be so arranged, that the plants will show to good advantage, and each one enjoy as much light and air as possible. If any of them are crooked, they should be carefully tied up to neat stakes.

After the plants are all arranged, they may have a good syringing, performing the operation in the morning if the weather is cool, or at night if warm ; but, after cool weather sets in, all syringing, as well as watering, should be done in the morning.

If we were treating of the management of the camellia exclusively, we could considerably extend our remarks on their winter management, such as the temperature, light, water, heat, &c., but as our advice is intended principally for those who cultivate a variety of plants, it is unnecessary to do so. The camellia, as well as all greenhouse plants, requires to be kept cool and *well aired*, until the approach of severe weather, without any application of fire heat as long as it is possible to keep the temperature at 38° or 40°

at night. Nothing is more prejudicial to all plants than a high temperature in the early part of winter.

It is supposed, that, where there is much of a collection of plants, they will be kept together, for there are many advantages in this ; they can, of course, be removed to the most conspicuous parts of the house when in bloom, but, at other times, it will be best to have them form a group by themselves. After they have all been arranged, as we have advised, no particular care is needed until they begin to grow again in the spring. If the leaves are very dirty, it will be well to wash them carefully with a sponge, finishing with a good syringing, or to wipe the leaves very carefully with a piece of dry and fine linen. If there are any scales, or other insects, the sponge and a small brush, to destroy them, are best. When neatly done, this gives the foliage a brilliancy and lustre which render the plants doubly beautiful.

The camellia, as we have before remarked, is fond of moisture, yet this must not be applied in excess, or the plants will be likely to drop their flower-buds. Observation and experience are the only guides to the proper application of water. It is impossible to apply any rules. In warm sunny weather, the plants will need water two or three times a week ; in cold, damp weather, only once. The best guide is to always keep the earth moist without being saturated. Once or twice during the winter the pots should be thoroughly washed, and each time the surface of the soil should be cleared of any moss and made level.

From December to March, the plants will display their beautiful flowers, the height of their bloom being about the middle of February. About the first of March the plants will show signs of growing, unless the house is kept very cool. But, whether then or later, as soon as the buds break, the plants should be rather more liberally watered ; they should also be freely syringed in all good weather. If the rays of the sun are too powerful, the glass should be whitened, or a thin shade may be put up ; but it is absolutely necessary to have some shade, especially if the glass is liable to burn.

By the middle of May the plants will have so completed their growth that the flower-buds will appear ; as soon as this is observed, the temperature of the house should be

slightly raised, as this will assist the buds in forming. Syringing may be omitted for a few days, and, by the first of June, the buds will be so prominent that preparations may be made for removing the plants to the open air. This, however, should not be done all at once. Only such as have formed buds should be taken out ; the remainder may be left until the flower-buds appear, when they should be placed with the other plants.

SUMMER TREATMENT.

Early in June preparations should be made for the removal of the plants to the open air. For this purpose, select a half shady situation, not under the drip of trees, but an open, airy, shady place, on the north side of a high fence, or a hedge, or, if neither of these opportunities occur, they may be placed under the shade of high trees, in preference to a sunny aspect. We have fitted up a place for our large collection, which is constructed of laths, and which answers a good purpose. It is simply a shed, running north and south, the sides as well as the roof being covered with laths one inch apart. This admits all the rains, an abundance of light, and breaks the wind sufficiently to keep it from injuring the plants.

The plants should all be placed upon boards ; for we have found that coal ashes, so often recommended, does not so effectually prevent the ingress of worms as boards : these being in readiness, in whatever place the plants are to stand, the removal of them may at once commence, selecting a pleasant day for the purpose. The arrangement of the plants should be such as to allow of facilities for watering, and, at the same time, so that each will receive a due share of light. This done, it will only be necessary to give a sufficient quantity of water, syringing at least twice a week.

In August, repotting must be duly attended to, after which the plants should be carefully rearranged, pruning such as need it, as we have before advised. For a short time, water should be given carefully through a fine rose, so as not to disturb the surface of the soil ; syringing should also be continued until the nights become cool in September. No further

care will be needed until the time for removing them to their winter quarters, as we have directed under the head of winter treatment.

INSECTS.

The principal insects which attack the camellia are the red spider, (*acarus*,) the kermes or scale, (*coccus*,) and the mealy bug, (*coccus*.)

The most troublesome of them, because the hardest to destroy, is the brown scale : the red spider is much more destructive to the plants if allowed to increase, but, if taken in hand in time, is readily destroyed. The mealy bug sometimes infests the plants, but more rarely than the others : the green fly or aphid is so common in all plant houses, and so readily killed by fumigation with tobacco, that we can scarcely say it is one peculiar, or very troublesome, to the camellia.

The *red spider*, if numerous, may be killed without much trouble in the house : one or two good fumigations with sulphur will destroy them all, and without the least damage to the plants, if properly done. If, however, the red spider attacks the plants while in the open air, they will not be got rid of so easily : oil soap must be resorted to for this purpose, giving them one or two syringings, or, if numerous, a third one. By this means, they will all be destroyed.

The *brown scale* which attaches itself to the leaves, on the under or upper side near the midrib, or at the angles of the shoots and leaves, can only be destroyed by washing them off, or crushing them with a small stick. They are unsightly insects, and, although they do not seem to injure the vigor of the plants but little, they give them such a dirty appearance that they are despoiled of all their beauty. Clean soap suds and a sponge, with a sharp-pointed stick, will be ample to check their ravages, and clear the plants.

The *mealy bug* does not often trouble the plants, but when numerous they must be got rid of in the same manner as the scale.

Earth worms often find their way into the soil, and by their continual burrowing completely exhaust the compost of all its cohesive properties, and often quite destroy the

plants; when they become thus destructive, it is best to give the soil a good watering with lime water, not too strong, and the worms will speedily leave the pots.

(*To be continued.*)

ART. IV. *Floricultural and Botanical Notices of New and Beautiful Plants figured in Foreign Periodicals; with Descriptions of those recently introduced to, or originated in, American Gardens.*

Schubertia graveolens, which we noticed in our last volume, (XIII. p. 401,) is now beautifully in bloom, and the plant, having become strong, shows better its real merit. It forms an admirable companion to the exquisite *Stephanòtus floribunda*, the flowers being very similar, with a most delicious odor, and the foliage large and handsome. In another number we shall endeavor to give some account of the treatment of both of these fine acquisitions to our collections, with engravings of the flowers.

Tetranema mexicana, a very handsome, half-hardy plant, allied to the *Pentstemon*, with heads of tubular blossoms, is now coming into flower. It is a very fine acquisition to our collections.

72. *MANÉTTIA MINIÀTA* Nob. Vermilion-flowered *Manettia*.
(*Cinchonaceæ*.) South America.

A greenhouse climber; growing four feet high; with vermillion-colored flowers; appearing in November and December; increased by cuttings; cultivated in leaf mould, loam, and sand. *Flore des Serres*, 1848, pl. 31.

Manétia bicolor is well known as one of the prettiest of our greenhouse climbers, displaying an abundance of bloom from October till January, if allowed a warm situation. *M. miniàta* is another pretty species, recommended to all amateurs for its elegant habit, neat foliage, and its long velvety flowers, of bright vermillion, changing to rose. Its treatment is the same as the *M. bicolor*. (*Flore des Seres*, Feb.)

73. STA'TICE' IMBRICA'TA *Webb* Imbricated Statice. (*Plumbaginaceæ.*) Canaries.

A greenhouse plant; growing two feet high; with blue flowers; appearing in summer; increased by division of the root and by seeds; cultivated in loam and peat. *Flore des Serres*, 1848, pl. 320.

This is one of the finest statices which has been introduced, and must be regarded "as one of the most interesting for the size of its corymbs, and the special form of its foliage." The stem rises to the height of two or three feet very much branched, and covered with numerous small flowers, with a bluish violet calyx, and a white corolla, presenting a pretty contrast. It was raised in the establishment of Messrs. Thibaut and Keteler, of Paris, in 1846, from seeds received from the Canary Isles, where it was first discovered by Mr. P. B. Webb. It should be cultivated in a rich light loam. (*Flore des Serres*, Feb.)

74. STA'TICE FRUTE'SCENS *Webb* Frutescent Statice. (*Plumbaginaceæ.*) Canaries?

A greenhouse plant; growing one foot high; with white flowers; appearing in summer; increased by seeds and division of the roots; cultivated in good rich soil. *Flore des Serres*, 1848, pl. 323.

Another fine species, and from the same source, first introduced to notice by M. M. Keteler. Differing mostly from the imbricata in its mode of growth, its more compact corymbs and its violet calyx. (*Flore des Serres*, March.)

75. BRUNSVIGIA JOSEPHINÆ *Ker* Empress Josephine's Brunsvigia. (*Amaryllidaceæ.*) Cape of Good Hope.

A greenhouse bulb; growing three feet high; with orange and scarlet flowers; appearing in summer; increased by offsets; cultivated in rich loam, leaf mould, and sand. *Flore des Serres*, 1848, pl. 322.

The Brunsvigia is considered to be one of the most magnificent plants ever introduced. It came from the Cape, and first flowered in the garden of the Empress Josephine, at Malmaison. It is now comparatively an old plant, but it is rarely seen in collections to which its brilliancy should entitle it to a place. It throws up a stem crowned with fifty or sixty flowers, of a deep orange yellow, shaded with purple on the inside. Its cultivation is simple, requiring to be kept cool and dormant in winter, and plenty of light and moisture in summer. (*Flore des Serres*, March.)

76. *ÆGIPHILA GRANDIFLO`RA* Hook. Large-flowered *Ægiphila*.
(*Verbenacæ*.) Havana.

A stove plant; growing two feet high; with yellow flowers; appearing in spring; increased by cuttings; cultivated in loam, leaf mould, and sand. *Flore des Serres*, 1848, pl. 324.

A very pretty plant, with clusters of bright yellow tubular flowers, and handsome foliage. (*Flore des Serres*, March.)

77. *CHLEDA`NTHUS FRA`GRANS* Lindl. Fragrant *Chledanthus*.
(*Amaryllidacæ*.) Peru.

A greenhouse bulb; growing one foot high; with yellow flowers; appearing in summer; increased by offsets; cultivated in loam, leaf mould, and sand. *Flore des Serres*, 1848, pl. 326.

78. *CENTAURE`A AMERICA`NA* Nutt. American *Centaurea*.
(*Asteracæ*.) North America.

An annual plant; growing three feet high; with lilac flowers; appearing all summer; increased by seeds; cultivated in any good soil. *Flore des Serres*, 1848, pl. 327.

This is our well known American centaurea, one of the showiest of our annual flowers, for a long time called the *Plectocephalus*. We are glad to see the old name restored. (*Flore des Serres*, March.)

ART. V. Notes on Gardens and Nurseries.

Residence of S. Bigelow, Esq., Brighton, July 20th.—A recent visit to Mr. Bigelow's garden has pleased us so highly that we must give our readers some account of the improvements and alterations which have been made the past year. This fine residence is situated on the Brighton road, leading to Nonantum Street, nearly opposite the residence of the late Gorham Parsons, Esq. It comprises, in all, more than sixty acres of land, finely located, sloping gently to the south, and sheltered by the high land at the north, from the top of which a most magnificent panorama is afforded of the surrounding country. The garden and grounds around the house contain about six acres, laid out in a neat style, and more than two thirds of this is filled with fruit trees, plants, flowers, &c.

The principal feature of the garden is a new and substantial greenhouse completed last year, upon the plan of one at Blithewood, on the North River, and it makes a very hand-

some structure, in excellent keeping, with a Gothic cottage or villa, but not harmonizing with the Grecian or Italian style. It is one hundred feet long, and divided into three compartments, the centre, twenty feet wide, being the greenhouse, and the two wings, forty feet each, the graperies. The greenhouse is built with a projecting gable, and opens to the main walk leading to the house.

The graperies are in fine condition; the house was not completed till late in the summer of 1847, and the vines were not planted till the fifth of July, being then only one year old in pots, supplied by Messrs. Hovey & Co.; but they now have new canes reaching to the top of the house, and some of them have five or six large and splendid bunches of grapes upon each vine. This shows how soon a properly managed grapery can be made to produce fruit. Under the management of Mr. Burns, we have no doubt, each vine will produce ten pounds of grapes, next year, without any injury to their future health. The border was trenched *three* feet deep, and is about twenty-four feet wide, made with loam and rotten dung, with fifty bushels of ground bones. The vines are in the most vigorous condition, with shoots an inch in diameter. The whole arrangements of the house are so well carried out, that we shall endeavor to give a plan in a future number. The boiler is one of Mr. Whitely's manufacture, and heats the house in the most thorough manner.

The open garden was radiant with a profusion of brilliant verbenas, petunias, featherfew, 10-week stocks, heliotropes, &c. The stocks were exceedingly showy, particularly some white ones, and the petunias remarkably fine. These lined one side of a long walk, the other, forming the orchard, lawn, &c. Not a weed was to be seen, and the whole indicated the attention and care of Mr. Burns, the gardener.

Residence of Dr. Mathers, Nonantum Street.—Mr. Needham, who is well known as one of our best grape cultivators, has some capital vines under his care at this garden. A small house, erected last year, for early grapes, and forced tolerably early, was now bearing an immense crop of fruit. To show to what extent the fruit-bearing powers of a vine may be taxed, we will merely state, that the vines were raised from eyes a year ago in March, and were set out in

June, making strong canes to the top of the house by October last. Some of them were pruned to the length of the rafters, about twelve feet; these now are bearing, some of them twenty bunches of grapes, weighing at least fifteen pounds; the shoots are all laid into pots *twice*,—once near the root and a second time on the back curb of the bed, which fills the centre of the house. By this means, the shoots are enabled to take up a quantity of nourishment, which enables them to be partially independent of the parent vine, a new shoot being brought up from the base to take the place of the one in fruit. Mr. Needham has practised this plant extensively and with the best success.

In the graperies, the vines have a good crop. Some of the Cannon Hall were producing uncommonly large berries and bunches; this is truly a noble grape. Other new sorts were the Palestine grape, which produces large clusters, weighing eight or ten pounds. The leaves are very much divided, and the clusters very large and long. The Muscats of Alexandria were also showing some well set clusters of fine size. Indeed, all the vines looked well under the good management of Mr. Needham.

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Summer Management of Pyramidal Pear Trees.—The following remarks on pruning dwarf pear trees, were intended to appear in our June number, but, for want of room, they were laid aside. They are yet quite seasonable, and should be attentively read by all cultivators:—

A few directions for summer-pruning pyramidal pear trees, will not, perhaps, here be out of place. I gathered some experience during my tour in Belgium and France, which I feel happy to impart. I have, in the "Miniature Fruit Garden," given directions to shorten *all* the shoots of pyramidal pear trees towards the end of summer; if root-pruning is closely attended to, I am still inclined to consider it best to do so; but if the trees are suffered to grow naturally, a modification of the pinching system of Monsieur Cappe, as given in the *Gardener's Chronicle*, No. 28, 1847, may be followed with advantage.

To follow this method, close attention must be paid to the trees early in

June, and every shoot on the horizontal branches, except the leading shoot on each branch, must be pinched off to within three or four buds of its base, the foreright shoot on each branch must be left to exhaust the tree of its superabundant sap. In Belgium, I observed all these foreright shoots on the trees towards the end of August, and I was told that they were left to exhaust the tree of its sap, and were not removed till the winter pruning, when they were shortened to within four or five buds. I am inclined, however, to think that it would be an improvement to shorten them towards the end of August, as the buds would then swell and prepare themselves to form, in the following season, bloom buds. The leading shoot of the tree may also then be shortened; this gives pyramidal trees a dressed and cultivated appearance, and exposes the fruit to the full influence of the sun and air. I must say, however, that I prefer root-pruning to pruning of the shoots, and the trees of Monsier Cappe, in the Jardin des Plantes, at Paris, confirmed me in this opinion; these trees are not, strictly speaking, pyramidal trees; they are rather conical trees, with very broad bases, requiring much more room than pyramids. No trees can be more beautiful as to the equal distribution of their branches, but they are sadly lacking in a tendency to fruitfulness. I think I write the truth when I say, that, in this fruitful season, not more than half the trees had fruit upon them, and this after many years of careful cultivation; and I was informed by a friend living near the spot, that this was the first year they had borne any quantity of fruit. It is indeed a joke among the French gardeners, probably dictated by a little envy, that the trees of M. Cappe are "exceedingly productive—in leaves and shoots!"

On the continent, root-pruning is not known or thought of, and if broached, it would probably be excessively ridiculed; but the trees of M. Cappe, with their over-luxuriance, I have no doubt, would be much benefited by it, in spite of the dry soil and climate of Paris. I was informed that all his trees were on the pear stock, which will account for their vigorous growth.

The quenouille, or tying down system, is now quite out of fashion in France, and, in truth, it does look very barbarous and unnatural; the trees trained in this manner, in the Potagerie, at Versailles, are mostly on quince stocks; they are from twenty to forty years old, and are very productive, but very ugly; all the shoots from the horizontal and depressed branches had been cropped off apparently in July, as Monsieur Puteau, the director, is, I believe, adverse to the pinching system of M. Cappe. I did not observe a single quenouille in Belgium, all were pyramids, even in the gardens of the cottagers, and, in general, these were very beautiful and productive trees. In many cases, when on the pear stock, they were too luxuriant, and required root-pruning, but this I could not make the gardeners comprehend.

If the article in the *Gardener's Chronicle*, No. 28, 1847, is read attentively, it will be seen that M. Cappe is constantly at war with the heads of his trees; his pinched shoots will often break again and again, and give him much trouble. I closely examined some of his trees, of sorts which I knew to be, under ordinary management, shy bearers, and found them, to

use the language of my note-book, "entirely bare of fruit and fruit-buds;" this was towards the end of last August.

The pinching system of M. Cappe, without root-pruning, is, therefore, objectionable for small gardens, on account of the trees requiring much room, and becoming difficult to manage, from their great size and height; for many of his trees are more than 15 feet high. The leading shoots of the horizontal branches of his trees are often left in the winter-pruning nearly one foot in length; I observed this on the trees of *Beurré Diel*, *De Curé*, *Beurré Rance*, &c. &c., so that the trees soon spread over a considerable surface; a tree of *Louise Bonne*, however, was most beautiful and compact; also a tree of *Beurré d'Amanlis*, which was covered with fruit and fruit buds. *Sans Pepin* was bare of fruit, but a most regular and beautiful tree. It appears to me that the pinching system, coupled with root-pruning, will be all that can be desired in pear culture.

For large gardens, the broad-based conical trees, on the pinching system of M. Cappe, with triennial or quinquennial root-pruning, will be found advantageous; for smaller gardens, the more closely pruned pyramidal or cypress-like trees, with biennial or annual root-pruning, are sure to be annual sources of pleasure, as they will be always within the reach of the amateur pruner, who can thus give his trees an occasional pinch without inconvenience.—(*Rivers's Catalogue*.)

ART. II. Domestic Notices.

Exhibitions of Horticultural Societies.—The annual exhibitions of several horticultural societies will be held in September and October, as follows.—

The Massachusetts Horticultural Society, on Tuesday, Wednesday, and Thursday, September 19, 20, and 21.

The New Haven County Horticultural Society, Tuesday, Wednesday, and Thursday, September 26, 27, and 28.

The American Institute, New York, from Monday the 2d to the 21st of October.

The Pennsylvania Horticultural Society, on Wednesday, Thursday, and Friday, September 20, 21, and 22.

The New York State Agricultural Society, at Buffalo, Tuesday, Wednesday, and Thursday, September 5, 6, and 7.

The Cherry Currant.—By our report of the Massachusetts Horticultural Society, it will be seen that the president exhibited some specimens of this new variety, which has been stated to be of very large size. We suspect, however, that it has been overrated, as the bunches were only *two* inches long, with *eight or ten* berries, and no larger than the *White Dutch*. We have seen it stated that the berries have measured an *inch* in circumference, but we have seen the *White Dutch* measuring *one and a half inches*. It

has an opaque and fleshy appearance, and is much more acid than the Dutch.

The Victoria Currant.—Some of the most magnificent specimens of this currant were also exhibited at the meeting on the 29th of July, from Capt. Wilson, of Marblehead. The clusters were *six inches long*, and contained *twenty-eight berries*; some of them *one and seven eighths* of an inch in circumference, far eclipsing all others ever exhibited. Our drawing in our last volume (XIII. p. 393,) which some cultivators thought exaggerated, does not do justice to this fine variety, as it was made from fruit produced on a young plant. It should be in every collection.

Great Crop of Strawberries.—Our correspondent, Mr. O. Johnson, of Lynn, informs us that he gathered *FIVE HUNDRED* boxes (quarts) of Hovey's Seedling strawberry from *one sixth* of an acre of ground, and that at least *one hundred* boxes rotted upon the vines; indeed, the crop was so large that it was almost impossible to gather them with the ordinary labor employed. We should be pleased to learn of such a yield as this from any other variety. It will be seen that Mr. Johnson carried off the first prize; his berries measuring 5 to 5½ inches in circumference, and uniformly beautiful, as this variety always is.

Great collections of Strawberries.—We see, by the report of the Genessee Valley Horticultural Society, that upwards of twenty five varieties of strawberries were exhibited at the meeting on the 15th of June. With the exception of Burr's new seedlings, and one or two other seedlings, all these varieties have been cultivated in the vicinity of Boston for the last ten years, and every one of them discarded as *worthless*, except Hovey's Seedling, the Early Virginia, (called the large Early Scarlet,) and Boston Pine. Ross's Phoenix has been tried again and again by our most experienced cultivators, but only *one quart* of fruit has ever been exhibited, and that was the present season by Messrs. Hovey & Co.; they would not, however, compare with other sorts. Our Rochester friends will have the gratification of possessing all these kinds; but they will come to the same conclusion that our cultivators have, viz:—that nearly all the 25 are unworthy a place in the garden.

Albany and Rensselaer Horticultural Society.—The second exhibition of the Society was held at the Court House, in Troy, on the 12th instant, JOEL RATHBONE, Esq., President, in the chair.

The show was in all respects such as to satisfy the friends of the Society; and its officers are encouraged in their efforts by the spirit which is manifested, and the continued evidence of the growing taste among exhibitors in the various departments.

FRUIT: The committee on fruit report that there was exhibited:—By J. Rathbone, five varieties of gooseberries, viz:—Yellow Amber, Red Warrington, Early Sulphur, Yellow Ball, and Yellow Champagne; three varieties of currants, viz:—May's Victoria, White Dutch, and Red Dutch, also Stoddart's Alpine strawberries.

By William Newcomb, Woodward's Whitesmith, and Crown Bob gooseberries, Red Dutch, Black Missouri, and Black English currants.

By V. P. Douw, Green Amber, and Woodward's Whitesmith gooseberries, Red Antwerp, and White Antwerp raspberries.

By Charles H. Merriut, of Troy, English Morello cherries; the committee cannot omit this opportunity to add, that, owing to the extreme vicissitudes of the last winter, the cherry trees in this whole vicinity, with the exception of an occasional isolated instance in well protected yards in the cities, have not borne fruit this season,

By J. W. Haydock, Greenbush, White Dutch currants.

By Dr. J. Wilson, of Bethlehem, White Antwerp raspberries, Yellow Amber, and Cottage Girl gooseberries, White Dutch, and Red Dutch currants.

By Henry Vail, of Mount Ida, twelve varieties of gooseberries, viz:—White Eagle, Edwards' Jolly Tar, Whitesmith, Yellow Ball, Champion, Wenman's Green Ocean, Williams's Favorite, Pitmaston's Green, Saunders's Cheshire Lass, Massy's Heart of Oak, Green Walnut, and Berry's Greenwood; four varieties of currants, viz:—White Dutch, Red Dutch, Champagne, and Black English; four varieties of raspberries, viz:—New Red Antwerp, Red Antwerp, Yellow Antwerp, and Franconia.

By Dr. H. Wendell, five varieties of gooseberries, viz:—Red Warrington, Massy's Heart of Oak, Woodward's Whitesmith, Champagne, and Berry's Greenwood; White Antwerp raspberries, and six varieties of currants, viz:—Knight's Sweet Red, White Dutch, Red Dutch, Large Fruited Missouri, Black English, and Pink Champagne.

By Alexander Walsh, Cosford filberts.

By Spencer Daniels, of Albany, Whitesmith, and two varieties of seedling gooseberries, of medium size, and fair character.

By James Wilson, three varieties of gooseberries, viz:—Golden Ball, Farrow's Roaring Lion, and Capper's Bonny Lass, two varieties of currants, viz:—Knight's Sweet Red, and White Grape, a large and beautiful new variety, but more acid than the White Dutch.

By Lawson Annesley, of Albany, six varieties of gooseberries, viz:—Red Warrington, Whitesmith, Williams's Favorite, Early Sulphur, Massy's Heart of Oak, and Crown Bob.

PREMIUMS: The committee have awarded the premiums as follows:—

Cherries.—For the best one variety, the only one exhibited, English Morello, to Charles H. Merriut, \$1 00.

Currants.—For the best and finest flavored variety, to James Wilson, for beautiful specimens of Knight's Sweet Red, a rich and favorite new currant, having much less acidity than any other variety, \$2 00. For the second best, and finest flavored, to Dr. H. Wendell, for very large and beautiful specimens of the White Dutch, \$1 00.

Gooseberries.—For the best and finest flavored variety, to Henry Vail, for very large and beautiful specimens of the White Eagle, a rich, sweet, and delicious variety, \$2 00. For the second best with same requirements, to Henry Vail, for very finely grown specimens of the Edwards Jolly Tar, a rich variety, and very little inferior to the above, \$1 00.

Raspberries.—For the best and finest flavored variety, to Henry Vail, for

beautiful specimens of the Red Antwerp, a large, firm, rich and delicious variety, \$2 00. For the second best, with same requirements, to V. P. Douw, for very fine grown specimens of the Red Antwerp, \$1 00.—*Herman Wendell, Chairman.*

Plants and Flowers.—The committee on greenhouse plants and flowers report that there were exhibited by Louis Menand, of Watervliet, twelve plants in pots, beautifully grown, and showing, in their culture, evidences of Mr. Menand's well known skill, viz :—*Agapánthus umbellata*, *Begonia sanguinea*, *Begonia manicata*, *Clêthra arborea*, *Fuchsia Chauvièrii*, and magnifica, *Gloxinia coccinea*, *Nerium Ragonati*, *Myrtus duplex*, *Veronica speciosum*, *Oncidium flexuosum*. Two varieties of carnations and *Crassula coccinea*, cut flowers, viz :—*gloxinias*, candida maxima, coccinea and speciosa ; *Roses*, *Noisette*, *Fellemborg* ; *Bourbons*, *Hermosa*, *Madam Desprez*, and *Marshal Villars* ; *Hyb. Perpet.* *Gloire de Guerin* ; *Tea*, *Flavescens* ; *China*, *Archduke Charles*, also *Phlox Onosmæflora*.

By Dr. H. Wendell, thirty-four varieties of large and beautiful Seedling pansies ; *Phloxes*, *Auguste*, *Anais Chauviere*, *Fleur de Marie*, *Picta*, *Van Houtii*, *Rosea superbissima*, *Norfolkii*, *Grato*, *Charles*, and *Alcarda* ; *Dahlias*, *Sylph*, *Oddity*, *Madam Chauviere*, *Lee's Bloomsbury*, *Striata Formosissimum*, and *Mrs. Rushton*. Three varieties of carnations, and a variety of other flowers, as *Eucharidium grandiflora*, *Nemophila discoidalis*, *Viscaria oculata*, *Fidelia gracifera*, *Calliopsis Drummondii*, *Silene Shafti*, *Phlox Drummondii*, several varieties of *Spireas*, &c. &c.

By William Buswell, fourteen varieties of carnations and picotees ; *Roses*, *Souvenir de Malmaison*, and *Queen of the Prairies*, *Verbenas*, pansies, heliotropeums, and a very fine plant of *Fuchsia Brookmansii* in a pot. By J. Rathbone, *Roses*, *La Reine*, *Solfitaire*, *Prince Albert*, *Doctor Marx*, and *Queen of the Prairies*. Nine varieties of verbenas, ten varieties of pansies, seven varieties of pinks, *Euphorbia splendens*, *spireas*, *pelargoniums*, *Salvia splendens*, *plumbagos*, *Gladiolus natalensis*, *cobæa scandens*, &c. By Frederick Keisel, of Albany, ten varieties of beautiful double seedling pinks.

By James Wilson, of Albany, *Roses*, *Flavescens*, *Gougere*, *Le Pactole*, *Solfitaire*, *La Reine* ; *Phloxes*, *Princess Marianne*, and *Alcarda*. Several varieties of carnations, and picotees ; *Lythrums*, *alata*, and *salicaria*, *epilobiums* ; *Spireas*, *lobata*, and several other varieties—*Potentilla Spotswoodii*, *Clématis integrifolia*, and *erecta*, *Dracocéphalum speciosa*, *Campanula pericifolia*, and *pericifolia alba plena* ; *Delphinums*, *elatum*, and *grandiflorum*, *Agrostemma flos. cuculâ*, *Lychnis viscosa*, *Oenothera odorata*, *verbascums*, several varieties of beautiful pansies, verbenas, &c. &c., and a large number of beautiful annuals. By D. Vail, *Dahlias*, *Mrs. Shelly*, *Model*, *Hamlet*, *Venusta*, *Marquis of Alyesbury*, *Princess Radzville*, &c.

By William Newcomb, *Roses*, *La Reine*, *Lamarque*, *Pallida*, *Pink Moss*, *George the 4th*, *Cabbage*, and *Queen of the Prairies* ; *Dahlias*, sixty-two varieties ; seventy-one varieties of annual and perennial flowers, viz :—*spireas*, four varieties, *Lychnis*, three varieties, *delphinums*, three varieties,

verbenas, six varieties, dianthus, six varieties, Iberis, two varieties, pyrothrums, and many other plants.

PREMIUMS: On Carnations and Picotees.—For the best six varieties, to William Buswell, for Empress, Portia, Euterpe, Flora, Incomparable, and Desdemona, \$2 00. For the best three varieties, to Dr. H. Wendell, for Ariadne, Ceres, and Josephine, \$1 00.

On Dahlias.—For the best display, to William Newcomb, \$2 00. For the best twelve varieties, to William Newcomb, for Caleb Cope, Conductor, Constantia, Mrs. Shelly, Essex Goldfinch, Princess Radzville, Isis, Ithuriel, Beeswing, Lady Featherstone, Marquis of Aylesbury, and Dowager Lady Cooper, \$2 00. For the best six, to D. T. Vail, for Hamlet, Mrs. Shelly, Model, Marquis of Aylesbury, Princess Radzville, and Venusta, \$1 00.

For the best display of perennial, biennial, and annuals, to William Newcomb, \$2 00.

For the best six greenhouse plants, in pots, to L. Menand, for Agapanthus, umbellata, Begonia, sanguinea, Cléthra arborea, Fuchsia Chauvirei, Gloxinia coccinea, and Veronica speciosa, \$2 00.—*S. Wickes, Chairman.*

FLORAL DESIGNS, BOUQUETS, &c.—The committee reports that D. Thomas Vail, exhibited one splendid large round bouquet, for centre-table vase, arranged with exquisite taste, and composed of choice roses, pelargoniums, pansies, fuchsias, verbenas, heliotropeums, &c., to which the committee awarded the premium of \$2 00.

One beautiful flat hand bouquet, composed of choice flowers; one round hand bouquet, composed of rare flowers beautifully arranged, and one beautiful basket bouquet, composed of choice roses, pansies, pelargoniums, fuchsias, &c., arranged with good taste.

By L. Menand, a very beautiful hand bouquet, composed of Gloxinia coccinea, Phlox Van Houttei, and anemoneflora, Euphorbia splendens, Erica Bouveana, Hoya carnosa, Russellia juncea, campanulas gardenias, Gladiolus formosissimus, roses in several varieties, &c. Also a beautifully arranged round hand bouquet, composed of about the same varieties of flowers.

By William Buswell, a flat hand bouquet, composed of spireas, campanulas, iberis, delphiniums, &c.

By Mrs. C. H. Merritt, a beautifully arranged vase of choice cut roses, pelargoniums, heliotropes, verbenas, pansies, &c.

By Dr. H. Wendell, an exquisitely arranged basket bouquet, composed of a large number of choice rose buds, pelargoniums, pansies, heliotropiums, &c., to which the premium is awarded of \$2 00. A round centre-table bouquet, arranged in good taste, and composed of choice roses, spireas, salvias, verbenas, carnations, pelargoniums, &c.

By William Newcomb, a flat bouquet, for mantel vase, composed of choice flowers, and arranged with good taste, to which the committee awarded the premium of \$2 00.

By J. Rathbone, two round centre-table bouquets, composed of choice roses, pinks, fuchsias, spireas, &c.

By James Wilson, a beautiful flat hand bouquet, composed of choice flowers, as Hoya carnosa, gardenias, calceularias, nerium; *Roses*, Ophire,

Le Pactole, Solitaire, Achimenes picta, fuchsias, gloxinias, Crassula coccinea; *Verbenas*, Eclipse, Polki, roseum, Feast's White, &c., and arranged with taste and skill, to which the committee awarded the premium of \$1 00. Also a very beautiful round hand bouquet, composed of about the same varieties of flowers, and exquisitely arranged, to which the committee awarded the premium of \$1 00.—*William Newcomb, Chairman.*

Veg tables.—The committee beg leave to congratulate the Society on the great improvement in the cultivation of vegetables in this vicinity, which cannot but be evident to visitors of our exhibitions. Vegetables, constituting, as they do, so large a portion of the necessary aliment of the community, deserve, as we are happy to perceive they are receiving, great attention from horticulturalists, both professional and amateur; and the committee cannot but commend the laudable efforts of a few, to introduce among us new and valuable varieties. There was exhibited by Henry Vail, two varieties of beets, three varieties of squashes, Biscuit potatoes of large size, and very fine appearance, said to be a valuable variety, and superior Ox Heart cabbages.

By Dr. H. Wendell, a brace of Victory of Bath cucumbers, twelve inches long, and a brace of Latter's Victory of England cucumbers, ten inches long. These new varieties were tasted by the committee, and pronounced very good; but, having been grown under glass, were not entered for competition. By Joel Rathbone, two varieties of string beans, several varieties of seedling Hybrid rhubarb, of very fine appearance, Yellow carrots, fine, and very large for the season, Double parsley, fine ripe tomatoes, Ash-leaved potatoes, and very large Early York cabbage. By V. P. Douw, Greenbush, ripe tomatoes, Blood beets, large Early York cabbages, Bell peppers, and fine early Sweet corn.

By F. Kiesel, Seymour's White Solid celery, very large and fine, and three beautiful specimens of Kohl Rabi, which being new to this vicinity attracted much attention from visitors at the exhibition. By William Newcomb, very fine Bassano beets, lentils, large and superior onions, salsify, fine White and Yellow carrots. By John Willard, three varieties of cabbage, all very large and fine, Ox Heart, Early York, and Bergen, very large and fine Silver Skin onions, Long Blood and Turnip beets, very fine; Yellow Altringham carrots, Early Frame cucumbers, very fine, but not entered for competition, as they were grown under glass; salsify, and very superior Mountain June potatoes, of large size.

The premiums were awarded as follows:—

On Squashes.—To Henry Vail, \$1 00.

On Early Corn.—To V. P. Douw, \$1 00.

On String Beans.—To J. Rathbone, \$1 00.

On Potatoes.—To John Willard, for Mountain Junes, \$1 00.

A special premium was awarded to F. Kiesel, for Kohl Rabi, \$1 00.—*C. N. Bement, Chairman.*—*B. P. Johnson, Secretary, Albany, July, 1848.*

Horticultural Exhibition of the American Institute, New York.—The Twenty first Annual Fair and Horticultural Exhibition of the American Institute will be held at Castle Garden, New York, in October next, com-

mencing on the 3d, and continuing open until the 21st. The exhibition will undoubtedly be a most interesting one, and, in connection with it, a Central Convention of Fruit-growers will be held on the 10th of October, at which delegates will be invited from the various horticultural societies in the country. We have not room to give all the particulars of the programme, but we annex, for the information of our readers, many of whom may be competitors for premiums, the following liberal list of prizes to be given :—

HORTICULTURAL EXHIBITION.

Agriculturists, Horticulturists, Florists, Amateurs, and the friends and patrons generally of rural pursuits, which contribute so largely to the health, happiness, and preservation of the human family, and, at the same time, elevate and enlarge the mind, are again solicited to come forward with an exhibition of the choicest varieties of their Fruits, Flowers, Vegetables, and other productions, at the Twenty-first Annual Fair of the American Institute, to be held at Castle Garden in October next.

Such articles as are intended for exhibition must be delivered on Monday, the 2d of October, in order that they may be arranged so as to show to the best advantage on Tuesday, the 3d; in the morning of which day, the doors will be opened to the public.

Admission tickets will not be given for inferior productions; and, when articles of trivial importance are offered for exhibition, those employed at the desk are requested and authorized to reject them.

As Agricultural and Horticultural books are not only the most suitable premiums for superior specimens of Garden and Field productions, but are very generally preferred, the Managers have been again induced to offer such mementoes, each one of which will contain a beautifully embellished certificate, explaining the nature and object of the award.

If any exhibitor should become entitled to more than one copy of the same work, he will be allowed the privilege of selecting another of equivalent value.

All productions placed in competition for any of the premiums offered, must be the growth of the competitors.

No specimens of vegetables, fruits, or flowers, embraced in assortments for which a premium may be adjudged in mass, will be allowed to be put in competition for such other premiums as are offered for the best varieties.

Competitors for the premiums offered for superior specimens of roses and dahlias to be exhibited on Monday morning, October the 9th, are requested to bring them in their own stands or show cases, in order that the flowers may appear to the best possible advantage.

Cultivators of flowers are respectfully invited to furnish fresh supplies as often as convenient during the fair, which will be duly appreciated by the managers, and recorded on the annals of the Institute.

As horticultural productions are of a perishable nature, the managers cannot, in every case, return them to exhibitors; those, however, who wish to claim their articles, are requested to take them immediately after the

close of the fair, or they will be considered as forfeited, and the seed of the best specimens will be distributed by the managers for the benefit of the public.

The following premiums are offered :—

FLOWER GARDENS.

For the best cultivated and most tastefully arranged flower garden,

Silver cup, \$10 00

For the second best,

Silver medal.

Florists and amateurs, wishing to compete for the above premiums, are requested to give notice, in writing, to T. B. Wakeman, Secretary of the Institute, on or before the 12th day of August next, stating residence, and such particulars as may be necessary to be known to the judges.

FLOWERS.

To be renewed during the Fair.

DAHLIAS.—For the largest display, . . . Silver cup, \$8 00

For the second, . . . Silver medal.

For the third, . . . Bedouir Botany.

For the fourth, . . . Downing's Horticulturist.

For the fifth, . . . Hovey's Magazine of Horticulture.

For the sixth, . . . American Flower Garden Directory.

For the next, . . . Mrs. Loudon's Ladies' Flower Garden.

For any further display, . . . Bridgeman's Gardener's Assistant.

CUT FLOWERS.—For the best ornamental design, . . . Silver medal.

For the second best, . . . The American Flora.

For the third best, . . . Hovey's Magazine of Horticulture.

For the next best, . . . Mrs. Loudon's Ladies' Flower Garden.

ROSES AND CUT FLOWERS.—For the best and greatest variety, . . . Downing's Horticulturist.

For the second best display, . . . The American Flora.

For the third best, . . . Parson's Rose Manual.

For the next best, . . . Prince's Manual of Roses.

BOUQUETS.—For the best and most beautiful,

Hovey's Magazine of Horticulture.

For the second best, . . . The American Flora.

For the third best, . . . American Flower Garden Directory.

For the next best, . . . Prince's Manual of Roses.

BASKETS OF FLOWERS.—For the best and most tastefully arranged,

Downing's Landscape Gardening.

For the second best, . . . Parson's Rose Manual.

For the next best, . . . Prince's Manual of Roses.

For the best basket of wild, . . . American Flower Garden Directory.

For the second best, . . . Bridgeman's Florist's Guide.

Eight copies of the Transactions of the American Institute will be awarded for such other displays of flowers or plants, as may be deemed by the judges entitled to consideration.

The following premiums are offered for roses and dahlias, to be exhibited on Monday, October 9th, at 12 o'clock :—

- ROSES AND DAHLIAS.**—For the best 20 varieties of roses, (named,) Silver medal.
- For the second best, Browne's Trees of America.
- For the next best, Parson's Rose Manual.
- For the best 24 varieties of named dahlias, Silver medal.
- For the second best, Browne's Trees of America.
- For the next best, Downing's Landscape Gardening.
- For the best 12 blooms of seedling dahlias, Silver medal.
- For the second best 12 blooms, The American Flora.

FRUITS.

For the choicest and greatest variety of fruit, Silver cup, \$10 00

APPLES.—For the greatest number of choice varieties,

- Six numbers of Hovey's Fruits of America.
- For the second best assortment, Downing's Horticulturist.
- For the third best, Bridgeman's Gardener's Assistant.
- For the next best, Transactions of the N. Y. State Agricultural Society.
- For the best 12 table apples, Kenrick's American Orchardist.
- For the best 12 winter apples, Prince's Treatise on Fruits.

CRANBERRIES.—For the best cultivated cranberries, Transactions of the N. Y. State Agricultural Society.

- GRAPES.**—For the best native grapes, Silver medal.
- For the second best, Four numbers of Hovey's Fruits of America.
- For the third best, Downing's Fruits and Fruit Trees of America.
- For the next best, Hoare's Treatise on the Vine.
- For the best foreign grapes, Silver medal.
- For the second best, Four numbers of Hovey's Fruits of America.
- For the third best, Bridgeman's Gardener's Assistant.
- For the next best, Kenrick's American Orchardist.

PEACHES.—For the best and greatest variety, Hovey's Magazine of Horticulture.

- For the best 12 peaches, (freestones,) Downing's Fruits and Fruit Trees of America.
- For the best 12 peaches, (clingstones,) Bridgeman's Gardener's Assistant.

NECTARINES.—For the best 12 nectarines, Transactions of the American Institute.

- PEARS.**—For the best and greatest variety, Six numbers of Hovey's Fruits of America.
- For the second best, Downing's Fruits and Fruit Trees of America.
- For the third best assortment, Bridgeman's Gardener's Assistant.
- For the next best, Transactions of the American Institute.
- For the best twelve table pears, Kenrick's American Orchardist.
- For the best twelve winter pears, Prince's Treatise on Fruits.

PLUMS.—For the best dish of plums,

Downing's Fruits and Fruit Trees of America.

For the second best, . . . Bridgeman's Fruit Cultivator's Manual.

QUINCES.—For the best assortment, . . . Bridgeman's Gardener's Assistant.

For the second best, . . . Kenrick's American Orchardist.

For the third best, . . . Prince's Treatise on Fruits.

ASSORTED FRUIT.—For the best assortment of fruit not previously described or provided for, . . . The Farmer's Library.

For the second best,

Transactions of the N. Y. State Agricultural Society.

Four copies of the Transactions of the American Institute, and four copies of the Transactions of the New York State Agricultural Society, will be awarded for such other description of fruit as may be considered by the judges entitled to a premium.

The list of premiums for vegetables we are obliged to omit.

GREAT CENTRAL CONVENTION OF FRUIT GROWERS.

This Convention will meet at Judson's Hotel, 61 Broadway, in the city of New York, on Tuesday, the tenth day of October next, during the Twenty-first Annual Fair of the American Institute.

The objects of which are as follows :

To compare Fruits from various localities, determine appropriate and correct names, and to settle doubtful points respecting them.

To compare opinions respecting the value of the varieties already in cultivation, and to endeavor to abridge, by general consent, the long catalogue of doubtful sorts at the present moment propagated.

Finally, to elicit and disseminate pomological information, and to maintain a cordial spirit of intercourse among horticulturists.

Horticultural societies and kindred associations in all parts of the United States are invited to send delegates, and, in order to increase, as much as possible, the interest of the Convention, they are requested to bring with them the best fruit grown in their vicinity, particularly all new and valuable seedlings carefully packed and labelled, so as to present them in perfect condition.

Nursery of Messrs. Hovey & Co.—The editor of the *Boston Transcript*, who has recently been the rounds of some of the amateur gardens and nurseries in the vicinity of Boston, gives the following account of his visit to the nursery of Messrs. Hovey & Co :—

"On a visit which we made a day or two since to this far-famed nursery, we were surprised at its extent and the immense variety of its contents. It comprises 35 acres of level, tillable land ; and four greenhouses, each 84 feet in length, three of them with span roofs, which really double the dimensions, by giving double the room. Of pear trees, it shows 1,000 healthy and beautiful specimens growing in avenues, embracing about 400 varieties ; while, of these trees, in stocks and ready for purchasers, there are about 50,000. Of peaches, there are some 8,000 trees ; of apples, 200 varieties, and 30,000 trees for sale ; of plums, nectarines, apricots,

cherries, about an equal number. The collection of forest trees, of evergreens, and rare ornamental shrubs, is large and choice. A whole phalanx of that graceful evergreen, the Norway spruce, may be seen in a square appropriated for their display.

"This is almost the only nursery in the country, where permanent fruit-tree specimens, of full growth, line the avenues for miles. The effect is excellent. It is also a great satisfaction to purchasers to be able to see not only the infant tree but the specimen in its prime. The grounds of this nursery are very commodiously and prettily laid out, and every season enhances the beauty of their appearance. The department of roses is particularly rich. Upwards of 800 varieties are here to be seen in full bloom. The whole neighborhood is scented with their delicious odor. In the houses there are 2,000 grape vines in pots, and from 25,000 to 30,000 plants of various kinds. The vines, which climb the sides and rafters of these houses, are remarkably luxuriant, and their heavy clusters of purple and white may now be seen in full perfection. The stagings and floors exhibit every variety of dainty and beautiful flowers and shrubs. Here may be seen the best collection in the country of Japan lilies, with numerous seedlings, that flower for the first time the present year. The delicate, vanilla-like fragrance of this lily distinguish it from all others. The fuchsias are abundant and large. The achimenes, gloxinias, and pelargoniums, the oranges, lemons, and cactuses, that immense *A'gave americana*, with its prickly tongue-like leaves, are all worthy the inspection of the lover of nature, and cannot fail to impart a lively pleasure. In short, we doubt if the visitor in Boston can pass an afternoon more pleasantly and usefully than by a visit to this spacious, well-stocked, and well-kept nursery of the Messrs. Hovey & Co."

[We will only add, that Messrs. Hovey & Co. will always be happy to see all pomologists and cultivators of fruits, or amateurs of plants, at their gardens.—*Ed.*]

ART. III. *Massachusetts Horticultural Society.*

[The business meetings of the Society in June, not having been received in time for our last number, they are now annexed.]

Saturday, June 3d, 1848.—An adjourned meeting of the Society was held to-day—the President in the chair.

A communication was received from Edward Bartlett, Esq., of Newburyport, accompanied with seed of the Potato as found indigenous in Peru; and *Voted*, that the thanks of the Society be presented to Mr. Edward Bartlett, and the seed placed in the hands of the Committee on Vegetables, for distribution among the Society's members.

The subject of holding a festival at the close of the present season having been discussed, it was *Voted*, that the whole subject be referred to the Committee of Arrangements, with instructions to report at the next meeting.

The following gentlemen were elected members of the Society:—Mark Healey, Boston, Lyman Kinsley, Canton, Mass., Thomas Morgan,

Boston, John King, Dedham, Henry P. Haven, West Haven, J. W. Brown, Beverly, H. K. Moore, Chelsea, John M. Gourgàs, Quincy.

Adjourned two weeks—to June 17th.

June 17th.—An adjourned meeting of the Society was held to-day,—the President in the chair.

Several copies of the report of the Committee of the Cincinnati Horticultural Society, on the *Strawberry*, were received through A. H. Ernst, and it was *Voted*, that the thanks of the Society be presented to the Committee.

The Committee of Arrangements, to whom was referred the subject of holding a festival, *reported*, that they recommend that the Society hold a festival, in Faneuil Hall, at the close of the annual exhibition in September next.

Voted, That the President, Vice President, and Secretaries, be added to the Committee of Arrangements, as a committee to manage all matters pertaining to the festival.

Voted, That the Committee thus constituted have full powers to appoint Marshals, and to call in such other aid, as they may deem expedient.

On motion of Mr Samuel Walker, it was *Voted*, That, whereas an invitation has been extended to this Society by the New York Agricultural Society to send delegates to a Pomological Convention, to be held in Buffalo, in September next, and whereas a call has been made through a public medium, by a member of the Pennsylvania Horticultural Society, for a similar meeting, and also an application from the American Institute that such a convention should be holden in the city of New York, in October next, therefore *resolved*, that a committee of three, consisting of the President and two others, be appointed by the chair, to correspond with the above named parties, and report at a future meeting what, in their opinion, is desirable to be done in the matter.—Messrs. Samuel Walker, and Ebenezer Wight, were appointed the committee.

Adjourned for one week—to June 24th.

June 24th.—An adjourned meeting of the Society was held to-day—the President in the chair.

No business coming before the meeting it was dissolved.

July 1st.—A stated meeting of the Society was held to-day,—the President in the chair.

The following gentlemen were elected members of the Society :—A. D. Webber, Boston, Adin Hall, Boston, W. Spencer, Lowell, Nathaniel H. Emmons, Boston, W. E. Strong, Brighton, D. S. Kendall, Boston, Noah Sturtevant, Boston, William H. Davis, Milton, Lyman Winship, Brighton, Selden Crockett, Boston.

Adjourned one week—to July 8th.

Exhibited.—*FLOWERS*: From the President of the Society, a fine display of cut flowers, including many roses, among which were Solitaire, Elize Sauvage, and others; Japan lilies, phloxes of several kinds, gladioluses, *Verónica speciosa*, and *Lindleyana*, &c. &c. From J. Breck & Co., a great variety of cut flowers, including several kinds of hardy lilies, *Campanula Wahlenbergii*, &c. &c. From J. Cadness, a collection of *Prairie*, *Lamarque*, *Solitaire*, and other roses, and two mantel and six hand bouquets.

From Messrs. Hovey & Co., a handsome display of Prairie roses in thirteen varieties, as follows:—Queen, Baltimore Belle, Superba, Caradori Allen, Perpetual pink, pallida, Anne Maria, Eva Corinne, Jane, Miss Gunnell, Triumphant, Pride of Washington, and Milledgeville; also six fine fuchsias in pots, viz., Nymph, Defiance, Expansa, New Globe, Enchantress, and a new seedling, (weeping); and Anne Boleyn pink, &c. Cut flowers, bouquets, &c., were exhibited by T. Needham, W. Kenrick, Miss Russell, J. Nugent, Messrs. Winships, A. Bowditch, S. Walker, and others.

AWARD OF PREMIUMS.

PLANTS IN POTS.—To Hovey & Co., for six fine fuchsias, well grown, \$2.

BOUQUETS.—To J. Cadness, for the best pair of *mantel* bouquets, \$2.

To Messrs. Winship, for the second best, \$1.

To A. Bowditch, for the best *vase* bouquet, \$2.

To Jas. Nugent, for the second best, \$1.

FRUIT:—From the President of the Society, three new varieties of cherries, viz., Bigarreau Princess, Bigarreau Gabaulis, and Belle Audigeoise, all of which, the committee say, are fine; also, Waterloo. From O. Johnson, superior specimens of Bigarreau Colouer de Chair, White Bigarreau, Black Tartarian, and Sparhawk's Honey Heart; also very beautiful and well ripened specimens of Coolidge's Favorite peaches, Zinfindal grapes, and Prince Albert and superb Hovey's Seedling strawberries. From J. F. Allen, thirteen varieties of grapes, beautiful specimens of Elton and Black Tartarian cherries, and Black figs. From P. Barnes, four boxes of white Bigarreau cherries. From A. Bowditch, Black Hamburg grapes. From Capt. Macondry, Sharp's Seedling peaches, very fine. From Isaac Fay, Fay's Seedling strawberries. From J. Richardson, Seedling strawberries, Nos. 3 and 5.

VEGETABLES: From Thomas Needham, a brace of Walker's Prize cucumbers. From Gen. Jones, by H. Olmstead, Summer squashes.

July 8th.—An adjourned meeting of the Society was held to-day—the President in the chair.

There being no business, the meeting was adjourned one week, to July 15th.

Exhibited.—FLOWERS: From the President of the Society, roses, dahlias, a variety of fine phloxes, pelargoniums, &c; among the phloxes, Fleur de Marie was the best: also pot plants, among which were *Veronica Lindleyana*, seedling Japan lilies, and the new *Heliotropium Voltairianum*, and two fuchsias, Napoleon and Exquisita. From J. Cadness, plants of *Stigmaphilon ciliatum*, a pretty greenhouse climber, *Anigozanthos coccinea*, *Mammillaria scopa alba*, *Achimenes*, &c.; also cut flowers.

From Messrs. Hovey, 6 varieties of Gloxinia, as follows; Cartoni, speciosa, insignis, Celestial, macrophylla variegata, and rubra; fourteen varieties of Prairie roses, including, in addition to those named in the last report, *Ranunculiiflora*, Linnæan Hill Beauty, and President, not before exhibited; carnations, picotees, and pinks. Cut flowers, bouquets, &c., from Messrs. Breck & Co., J. Nugent, A. Bowditch, Winships, J. A. Kenrick, Miss Russell, M. Healy, Miss Mary M. Kenrick, P. Barnes, and others.

AWARD OF PREMIUMS.

PLANTS IN POTS.—To J. Cadness, for the best six, \$2.

BOUQUETS.—To Jas. Nugent, for the best *vase* bouquet, \$2.

To A. Bowditch, for the second best, \$1.

To J. Cadness, for the best pair of *mar-tel* bouquets, \$2.

To Miss Russell, for the second best, \$1.

GRATUITIES.—To Miss Mary M. Kenrick, for a basket of flowers, \$1.

To Miss Russell, for a basket of flowers, \$1.

FRUIT: From O. Johnson, Napoleon Bigarreau, Florence, Black Tartarian, Colouer de Chair, and one variety of cherry without a name—all fine. From Edward Burns, Black Hamburg grapes, good. From J. F. Allen, Zinfindal, Chasselas, Wilmot's Black Hamburg, and Ferral grapes. From Messrs. Hyde, two varieties of Seedling cherries, fine. From F. W. Maccondry, Sharp's seedling, and Coolidge's Favorite peaches.

From Messrs. Hovey & Co, Hovey's Seedling, and Boston Pine strawberries; Fastolf raspberries, and Macready's Early White grapes. From J. L. L. F. Warren, White Wood strawberries. From Josiah Richardson, Seedling strawberries, No. 5, fine. From C. E. Grant, Fastolf and White Antwerp raspberries. From Azel Bowditch, Black Hamburg grapes. From Solon Dike, Seedling cherries. From Cheever Newhall, Knevet's Giant raspberries, fine.

AWARD OF PREMIUMS ON FRUITS.

The sub-committees, of the fruit committee, appointed to award premiums on Strawberries, and Grapes, reported the following:—

STRAWBERRIES.—To O. Johnson, for the finest strawberries, (Hovey's Seedling,) \$6.

To J. Richardson, for the second best, (Seedling No. 3,) \$4.

To Isaac Fay, for the third best, (Hovey's Seedling,) \$3.

GRAPES.—To J. F. Allen, for the best grapes exhibited before July 1, \$10.

To William Quant, for the second best, \$7.

VEGETABLES.—From Judge Cushing, Champion of England peas, in eating since the 25th June, very fine and worth cultivating. From F. W. Maccondry, new potatoes. From James Nugent, string beans. From A. D. Williams, cabbages.

July 15th.—An adjourned meeting of the Society was held to-day,—the President in the chair.

The President submitted the following report:—

The committee appointed to confer with the Pennsylvania Horticultural Society and American Institute in relation to the proposed Pomological Convention, reported, that it was deemed advisable to hold such a convention, and asked for authority to unite with the above societies in fixing an early day in October next.

A letter was received from Dr. Harris, librarian of Harvard University, requesting copies of any Transactions of the Society for their library.

Voted, That the subject of Mr. Harris's letter be referred to a committee consisting of the Corresponding Secretary, and Librarian, with instructions to request a copy of the University's catalogue.

Adjourned one week—to July 22nd.

Exhibited.—FLOWERS: From the President of the Society, seedling Japan lilies, and three fine gladioluses, viz. Duc d'Orleans, Liebnitzii, and Gandavensis. From J. Breck & Co, carnations, picotees, and other cut flowers in great variety. From Dr. C. F. Chaplin, Cambridgeport, a fine collection of Clove pinks, picotees, &c. From S. Walker, roses. (a fine cluster of Mad. Desprez,) phloxes, &c. From T. Needham, roses, and varieties of phlox, Gaillardia, var. Wellsiana, picta coccinea, &c. From Miss Russell, large mantel and other bouquets, carnations, &c. From J. Cadness, agapanthus, spiræas, phloxes, pinks, bouquets, and pot plants. From S. R. Johnson, a beautiful display of Jaune Desprez roses, pinks, picotees, &c. From P. Barnes, fine pinks, phloxes, Crassula coccinea, &c.

From Messrs. Hovey and Co, four plants of Achimenes longiflora, two of A. picta, a fine large specimen of the superb Hydrangea japonica with eight or ten heads of flowers, and Lillium speciosum album; also 12 named varieties of new carnations and picotees, a great number of new seedlings, Phlox Drummondii, &c. The ten varieties which obtained the premium were as follows:—Wilson's Harriet, R. F., Princess Victoria, P. P., Meteor, P. P., Duke of Newcastle, P. P., Seedling, S. F., Chadwick's Lucretia, R. F., Costar's Squire Clark, P. F., Ely's Scarlet Dragoon, S. B., and two without names. From J. E. Teschemacher, plants of Mamüllaria speciosa, Echinocactus, Melocactus, and one seedling. Bouquets, cut flowers, &c, from William Mellar, G. B. Richardson, William Merriam, A. Bowditch, William Winchester, J. Nugent, W. Ashby, and others.

AWARD OF PREMIUMS.

CARNATIONS AND PICOTEES.—To Messrs. Hovey & Co., for the best ten varieties, \$5.

No second premium awarded.

To Hovey & Co., for the best display, \$3.

BOUQUETS.—To J. Cadness, for the best mantel bouquets, \$2.

To Messrs. Winships, for the second best, \$1.

To Jas. Nugent, for the best vase bouquet, \$2.

To A. Bowditch, for the second best, \$1.

GRATUITIES.—To S. R. Johnson, for a display of pinks and picotees, \$2.

FRUIT.—From the President of the Society, Citron des Carmes pears, and the Cherry Currant, new and handsome. From J. S. Sleeper, Franconia raspberries, Florence cherries, and a seedling; this is the second year of trial of this cherry, and the committee were unanimous in passing the high encomium they had the previous season. From O. Johnson, Fastolff and Knevet's Giant raspberries; Zinfindal, Black Hamburgh, and White Frontignan grapes; Black Heart cherries, also a cherry without a name, of superior merit: Mr. J. has exhibited this cherry for six years, and has not yet been able to identify it with any known variety. From Galen Merriam, Downer's Late cherries. From Samuel Walker, Black mulberries.

From J. Lovett, large and fine specimens of Knevet's Giant, and Fastolff raspberries. From Hovey and Co., Fastolff, and Franconia raspberries, and Macready's Early White grapes. From J. F. Allen, Franconia raspber-

ries, large; Esperione, Chasselas, Red Traminer, fine, Ferral, Zinfindal, White Nice, Black Hamburg, and Wilmot's new B. Hamburg grapes. From F. W. Macondry, gooseberries, mulberries, Knevet's Giant, Franconia, Fastolf, and Antwerp raspberries, and Transparent and Florence cherries. From T. Needham, Cannon Hall, Chasselas de Fontainebleau, Black Hamburg, and Frontignan grapes. From Messrs. Hyde, seedling cherries, (fine,) and White thimbleberries. From A. Bowditch, Black Hamburg and White Chasselas grapes; peaches, fine. From H. K. Moore, Elkhorn cherries. From Parker Barnes, Black Mazzard cherries. From A. D. Weld, Red and White Dutch currants, fine; Franconia raspberries. From Cheever Newhall, Knevet's Giant raspberries, fine. From S. R. Johnson, gooseberries. From B. V. French, gooseberries, in variety; Red and White Dutch currants. From Messrs. Winships, Red and White and Victoria currants, Black mulberries. From A. D. Williams and Son, Red and White currants, large and fine. From C. E. Grant, Fastolf raspberries. From J. Hovey, gooseberries, fine. From L. G. Thurston, gooseberries. From F. Dana, Red and White currants, and raspberries. From Josiah Richardson, Franconia raspberries, and strawberries. From S. Dike, cherries. From Moses Young, Illinois, apples of last year's growth, in good preservation.

VEGETABLES.—From T. Needham, two brace Walker's Prize cucumbers. From F. W. Macondry, Early White potatoes, fine show. From A. D. Williams, Chenango, and Early White potatoes. From Barney Hedge, potatoes, very large.

July 22nd.—An adjourned meeting of the Society was held to-day,—the President in the chair.

John H. Robinson was elected a member of the Society.

Adjourned for two weeks—to August 5th.

Exhibited.—**FLOWERS:** From the President of the Society, 25 pots of Japan lilies, principally seedlings, one of them with nineteen buds and blossoms. From Messrs. Hovey & Co., a fine large plant of the white Japan lily, with sixty buds and blossoms, and a variety of hollyhocks and verbenas. Cut flowers, bouquets, &c. were exhibited from Messrs. Breck & Co., S. R. Johnson, P. Barnes, T. Needham, W. Mellor, W. Kenrick, J. A. Kenrick, Messrs. Winships, J. Hovey, A. Bowditch, S. Walker, J. Nugent, B. W. Ames, and others.

AWARD OF PREMIUMS.

DOUBLE HOLLYHOCKS.—To P. Barnes, for the best display, \$3.

To Hovey & Co., for the second best, \$2.

BOUQUETS.—To J. Nugent, for the best *rose* bouquet, \$2.

To A. Bowditch, for the second best, \$1.

To J. Cadness, for the best *mantel* bouquet, \$2.

To W. Mellor, for the second best, \$1.

GRATUITIES.—To Miss Russell, for a basket of flowers, \$1.

To Miss Mary Kenrick, for the same, \$1.

FRUIT: From the President of the Society, Late Duke Cherries, Anguinois apricots, and Black mulberries. From J. F. Allen, several varieties of grapes, Franconia raspberries, and Sweet Montmorency cherries. From

T. Needham, Cannon Hall Muscat, White Frontignan, August Muscat, (?) and other grapes. From O. Johnson, Zinfindal, and Black Hamburg grapes, small clusters, but finely colored; also, White Dutch currants. From J. Lovett, Knevett's Giant raspberries, currants, and gooseberries. From J. Hovey, seedling and other kinds of gooseberries, fine. From E. Brown, cherries. From J. Kenrick, mulberries. From B. V. French, Belle Mag-nifique cherries.

From Hovey & Co., very fine Victoria and White Dutch currants, and Chasselas of Fontainebleau, Black Hamburg, Pitmaston White Cluster, and other grapes. From A. D. Williams, Red and White Dutch currants. From Geo. Walsh, Black currants. From A. Bowditch, Black Hamburg and Chasselas grapes. From J. W. Foster, seedling gooseberries. From A. D. Weld, White and Red Dutch currants. From F. W. Macondry, Sharpe's Seedling peaches and raspberries. From J. Nugent, Black Hamburg and Chasselas grapes. From J. L. L. F. Warren, cherries, raspberries, and alpine strawberries, and Black Ischia figs. From S. Dike, cherries and figs.

VEGETABLES.—From T. Needham, a brace of Walker's Prize cucumbers. From J. D. Williams, cabbages and tomatoes.

July 29th.—*Exhibited*.—FLOWERS: From the President of the Society, two large Japan lilies, gloxinias, and a variety of phloxes and other cut flowers. From J. Cadness, some fine specimens of plants, beautifully grown, viz., *Veronica speciosa*, nine feet in circumference; *V. Lindleyana*, *Ixora rosea*, *Rondeletia speciosa*, *Stigmaphilon ciliatum*, fuchsias, &c.

From Messrs. Hovey & Co., *Achimenes longiflora*, *picta*, *longiflora*, *hirsuta*, and *patens*, and *Trachymene linearis*, also thirty varieties of verbenas, pinks, &c. Bouquets, cut flowers, &c., from J. Breck & Co., Winships, F. R. Bigelow, J. Nugent, T. Needham, L. Davenport, Mrs. Ball Hughes, and others.

AWARD OF PREMIUMS.

BOUQUETS.—To John Cadness, for the best pair of *mantel* bouquets, \$2.

To W. Mellar, for the second best pair, \$1.

To J. Nugent, for the best pyramidal bouquet, \$2.

To A. Bowditch, for the second best bouquet, \$1.

GRATUITIES.—To J. Cadness, for a display of greenhouse plants, \$5.

To Miss Russel, for a large bouquet, \$1.

FRUITS:—From Hovey & Co., Pitmaston White Cluster, Chasselas of Fontainebleau, Wilmot's Black Hamburg, very fine, White Frontignan, Muscat Blanc Hatif, Black Hamburg, Chasselas Musque grapes; Lamer-cier cherries; Doyenné d'Ete pears,—a good summer pear. From Henry Vandine, Citron des Carmes pears; Moorpark apricots, and one sort unnamed. From Galen Merriam, Citron des Carmes pears. From Josiah Richardson, Jaune Hative plums. From A. D. Williams & Son, Red and White Dutch currants; Citron des Carmes pears. From Azel Bowditch, Black Hamburg grapes, fine. From E. Browne, Lynn, Early Harvest apples; cherries without name; pears, two sorts, both for a name. From J. L. L. F. Warren, Franconia raspberries.

From J. F. Allen, currants; Franconia raspberries, fine; Hunt's Early Tawney nectarines; Muscat of Lunel, Esperione, Wilnot's Black Hamburg, White Nice, Ferral, and Zinfindal grapes. From A. W. Withington, Early Harvest and Red Astrachan apples; blackberries, fine. From Otis Johnson, blackberries; Citron des Carmes pears; Mazzard cherries; White Dutch currants, fine; White Muscat, Zinfindal, fine, Black Hamburg, fine, grapes. From T. Needham, Cannon Hall Muscat, Golden Chasselas, and Black Hamburg grapes. From Samuel Bigelow, Black Hamburg, fine, grapes. From Cheever Newhall, Citron des Carmes pears. From George Wilson, May's Victoria, very fine, White Dutch, very fine, currants. From John Washburn, Red Astrachan apples.

ART. IV. Retrospective Criticism.

The Aberdeen Beehive Strawberry, &c., (p. 332.)—As I invariably annex my name to every important horticultural communication, I do not deem it incumbent upon me to notice every anonymous scribbler, especially when he adopts that cowardly course in order to give to his "silly twattle" a degree of importance which would not be attached to his real identity. It would seem that, even now, the fable of *Æsop*, enrobing the ass with the lion's hide, is to be personified anew by the writer, who signs himself "A Subscriber," in your last number. The public would, however, be much the gainer, if he would confine himself to his "gallipots and jalap," in lieu of his perpetual filching and falsifying the writings of others, arising from his utter incapacity to originate one new idea. The article referred to is an appropriate sequence to one from the same writer in the *Horticulturist* for May, where he states, in reference to the "Aberdeen Beehive Strawberry," that "*but one nursery firm has imported it that we (he) know of*," when it was notorious, with all well-informed persons, that it existed in *at least five nurseries*, and probably in many more. As regards my statement concerning its character, *I examined the flowers carefully*, and found them to be staminate according to the usual application of the term, but hermaphrodite in point of fact, and I draw the inferences advanced from all past experience.

Now, sir, it is a positive fact, and Mr. Longworth and Mr. Huntsman agree with me, that, up to the present year, every hermaphrodite strawberry, originated in England and imported here, has proved *utterly worthless as to productiveness*. We have been favored with "Wilmot's Superb," "British Queen," "Elton Pine," "Myatt's Pine," "Myatt's Eliza," "Keen's Seedling," "Swainstone's Seedling," "Deptford Pine," and more than twenty other varieties extolled to the skies, which have crossed the Atlantic at great expense, each of which has, in its turn, sunk into merited oblivion. Even the "Beehive" variety in question has disappointed the expectations of several growers in England, and Professor Lindley declares that it is no wise superior to many of the older varieties. It may be fairly inferred, from all past experience, that the hermaphrodite varieties, (usually denominated staminate,) originated in England, although they

may suit that moist climate, and be there praised for lack of better, do not succeed at all in our dry and hot climate. In asseveration, I need but to appeal to your own pages for years back, where will be found announced nearly all the above-named varieties with high encomiums, but which have, one by one, taken their flight from your columns, and from your garden also, as your experience decided upon their worthlessness. It is utterly false that I have ever uttered conflicting opinions, but, like yourself and others, I have, on importing new varieties, attached to them *the European descriptions*, presuming them to be true, but, as soon as I have discovered they were not so, I have done—what no one else has done,—I have published the names of the worthless in a “Rejected List.” Even yourself, in your May number, p. 219, have “condemned with faint praise” the Aberdeen Beehive, by declaring you could “*see nothing, so far, of its superiority over other kinds; it is not large; and its whole merit, if it have any, must consist in its productiveness.*” I therefore ask of all impartial readers if I was not acting most justly to the public, when I cautioned them against another probable failure, based on all previous experience, and spurned the idea of profiting by the republication of another European laudation, to be followed, in all probability, by a future refutation.

In regard to the Montevideo Pine, it has been ignorantly denominated Turner's Pine, and your correspondent, with equal ignorance, states that it originated in England. It is true that I have formed a distinct class of its new varieties, and for the very especial reason, (of which your correspondent seems equally ignorant,) *that it is a distinct species*. It occupies a very erroneous position in the catalogue of the London Horticultural Society; and I am not one of those who are willing to swallow any errors simply because they have originated on the other side of the Atlantic, and especially not, when they attach to American productions, as in the present case. If the fruit is of “second quality” in the humid climate of England, that matters not with me, when, in exercising ordinary intelligence, I find its natural climate, (Buenos Ayres,) to assimilate, in its dry and powerful summer heat, to our own. My commendation (p. 282,) refers only to the “new seedling varieties which are perfectly hardy, but, by a despicable subterfuge, your correspondent makes me refer only to the original variety, and then goes on to state that it (the original Montevideo Pine) “winter-kills, &c.” But what will you think when I tell you, that *he has never cultivated the Montevideo Pine, and never seen one of its varieties*, and that all he says is the result of ignorance and malevolence! That writer has not entered my grounds for several years, but Messrs. Huntsman and Scott, secretaries of the Long Island Horticultural Society, are well acquainted therewith, and I appeal to them whether all my remarks, both oral and written, are not stated with candor, and also as to the usual want of it by the writer I am responding to; and, still further, as to the fact, that there does not exist in this town any extensive collection of the rarest varieties but my own. I have devoted many years of unceasing zeal to the subject, and at a large expense, and every premium of our Horticultural Society was this year awarded me. I have given, two years ago, my

general views on "The Strawberry Question," in the American Agriculturist, and Flushing Journal. That question has been more mystified by false European plaudits and descriptions, than by any other circumstance whatever. In each succeeding communication, I have stripped it of some of its falsities. I have continued the subject in the August number of the Horticulturist, and I shall conclude by a disquisition explanatory of all the apparent mysteries which have seemed to entwine the subject, and with the full results of my long and critical investigations of the great "Strawberry question."—*Yours, &c., William R. Prince, Flushing, July, 1848.*

P. S.—I shall discuss the merits of American grapes in a subsequent communication, when I shall touch upon certain *hybridized varieties with divided leaves*, which were announced a few years since.

[Had Mr. Prince's name appeared in full with the first notice of the Beehive, we should not have allowed "A Subscriber's" communication to have appeared in our pages, as it is a rule we have adopted not to allow an anonymous writer, (even though we have his name,) to attack a correspondent. We therefore insert Mr. Prince's communication, and would here state, that, as such a personal controversy is not very edifying or instructive to our readers, we shall not allow any further discussion to appear on either side. If the parties wish to use our columns, it must be in communications free from personal allusions, and upon some subject of interest to our readers.

We would, however, beg to make a single remark, and that is, that Mr. Prince is wrong in saying all staminate European varieties have proved "utterly worthless." Keen's seedling is an immense bearer, and its cultivation has not been given up because it was not productive, but from the fact that the plant was too tender for our severe winters, as well as our hot summers, and hence to assert, that the Aberdeen Beehive would prove worthless, *merely because it was staminate*, was pronouncing judgment before it had had a trial. If Keen's Seedling had all the hardy qualities of our seedling, it would, to this day, find a place in every collection of strawberries.—*Ed.*]

ART. V. Queries and Answers.

SPECIAL MANURES FOR TREES.—*A Cultivator.* We shall have something to say upon this subject ere long, for it is deluding too many inexperienced cultivators. Practical men know too much to be taken in by such *one ideas*. We expect soon to hear that good stable manure and loam are quite worthless things, and ashes and peat the only articles worth having. You will undoubtedly fully agree with us, that there is too much quackery carried on under the name of scientific gardening.

GRAPES.—*A.* There is no doubt the four kinds are quite distinct, notwithstanding Mr. Thompson makes some of them synonymous. The Wilmot's Black Hamburg is decidedly so, and the Victoria is certainly differ-

ent ; the leaves are considerably thicker than the old Hamburg. Wilmot's No. 16, is much like the old Hamburg in color, appearance, &c., but the flavor is finer. Cannon Hall is a superb grape, and the Tottenham Park is distinct from the Muscat of Alexandria, though similar to it. There is great confusion in the nomenclature of grapes, which we hope to see cleared up.

STRAWBERRIES.—*W. C. R.* The best plan of cultivating this fruit is to set the plants in rows two feet apart, and one foot from plant to plant in the rows. Next year, the plants may be allowed to run sufficiently to make a *continuous* row ; but the space *between* the rows must be kept clean by cutting off all runners after the 1st of August. In this way, you get the greatest quantity of fruit with the least trouble.

GREENHOUSE ANNUALS FOR WINTER.—*An Amateur.* The best for you are Candytuft, Schizanthus, Sweet Alyssum, Mignonette, Nemophilas, Phlox Drummondii, Leucaria, and China pinks. They should all be sown now.

HORTICULTURAL MEMORANDA FOR AUGUST.

FRUIT DEPARTMENT.

Grape Vines in cold houses will now need considerable attention, as this is the season when they are liable to be attacked by the mildew. See that the house is closed in cold windy days, aired early in the morning, and the walks, floor, &c., duly sprinkled ; a warm moist atmosphere is what they need until they begin to color, which will not be till the latter part of the month. Attend to the stopping of all laterals. Vines in the greenhouse will now have their crop nearly ready for cutting, the Chasselas and other early sorts being quite ripe. The Hamburgs will not yet have attained their color, and liberal quantities of air should, at all times, be given in good weather. Stop all laterals, and, where they are too much crowded, they may be cut quite back to the first joint beyond the fruit. Old vines may now be inarched ; this is the best way to secure a new sort, or to alter an old one. Vines in the open air will now need attention ; all the short shoots, except such as are wanted for next year's wood, should be stopped at one or two joints above the fruit ; if this has already been done, it will only be necessary to pinch them off when they break again.

Strawberry beds may be made the latter part of this month, as soon as the young runners get well rooted. Let the ground be well spaded, and trenched if possible, liberally manured, and the plants set out in rows 2½ feet apart and 12 to 18 inches in the rows. Old beds should be spaded under, as directed under this head in our last.

Fruit trees should be budded this month ; pears will now be in order, as also apples, and perhaps cherries, if they have not already been done.

Summer pruning should still be continued, persevering until the growth of vigorous trees is quite checked.

Raspberry plants should have their old shoots now cut out, and the new ones tied up to stakes.

FLOWER DEPARTMENT.

Dahlias will now be growing rapidly, and will need occasional pruning and tying up; the ground may be also mulched with old rotten manure, which will keep the soil moist and cool. If very dry weather, give them a good watering.

Chinese primroses, raised from seed, should now be potted off into three inch pots.

Cineraria seedlings should now be potted off into thumb pots.

Calceolarias should now be potted off into small pots; it is not too late to sow seed if there is not a supply of plants.

Pelargoniums, if not already cut down, should be attended to immediately: cuttings should be carefully shaded from the hot sun.

Roses may still be layered with good success, particularly prairies. Cuttings may now be put in of Tea, Bourbon, and other kinds, and budding may now be done.

Carnations and *Picotees* should now be layered, if not already done. Seedlings should now be pricked out in good rich soil; plants for forcing should be potted as soon as well rooted.

Oxalis hirta, and *Bowiei* should be potted this month.

Azalea cuttings, put in in June, should now be potted; the old plants may now have a shift into the next size.

Verbenas may now be layered in order to secure a stock for winter.

Cyclamens may be repotted this month.

Pansy seed, sown now, will make fine plants for spring flowering.

Camellias, if not potted, should now be attended to without delay. (See our article on this head.) Inarching and grafting may both be done now, and cuttings may be put in.

Orange and lemon trees may still be budded.

Perennial plants, raised from seed, may now be set out in beds, where they are intended to remain for bloom.

Neapolitan violets should be watered in dry weather.

Mignonette and *sweet alyssum* may still be sown for a winter crop.

Blue Nemophila should now be sown for winter flowering.

Schizanthus seeds should now be planted, if a stock is wanted for winter.

Anemone japonica.—Plants of this should be now shifted into a larger size, and be kept in a cool, half-shady place.

Chrysanthemums should be layered this month. Plants in pots should now be topped in order to make them stout bushy plants.

Japan lilies should be more sparingly watered, and, as soon as the flowers are all expanded, the plants may be removed to the open air.

Callas may be potted this month.

Sedum Steboldii in pots should now be shifted into a larger size.

THE MAGAZINE OF HORTICULTURE.

SEPTEMBER, 1848.

ORIGINAL COMMUNICATIONS.

ART. I. *Descriptions and Engravings of Select Varieties of Cherries.* By the EDITOR.

IN our volume for last year, (XIII. p. 394,) we commenced a series of articles under this head, in which we intend to accurately describe and figure, all the fine varieties of cherries worthy of cultivation. The past spring having been rather unfavorable to cherries, our specimen trees bore but little fruit, and that little was made "beautifully less" by the thievish propensities of the birds. Indeed, with a few exceptions, out of fifty or sixty kinds, we saved scarcely any really large and well ripened specimens, and these were only preserved by *netting* over the trees. What, however, we cannot do this year, we hope to accomplish next, when we shall endeavor, if a favorable year, to find some means of preserving the fruit from the depredations of the birds.

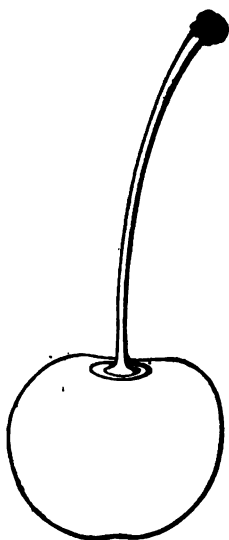
4. FLORENCE. Hort. Soc. *Catalogue*, 3d Ed. 1842.

Knevet's Late Bigarreau. Hort. Soc. *Cat.*, 3d Ed. 1842.

This fine cherry, which is yet but little known, was imported into England from Florence, about forty years ago, but the first fruit exhibited before the London Horticultural Society was in 1816. It is said to be extensively cultivated at Florence, where it is greatly esteemed.

The Florence, (*fig. 36.*) has been introduced into some of our amateur and nursery collections for several years, but,

from some reason, probably on account of its merits not being well known, it has not been generally disseminated. The tree, Mr. Thompson states, "does not bear well when young, but, when it does begin, it is an abundant bearer, well deserving of cultivation, as it comes in late in the season, after the Elton, and many other good sorts are over."



Within a year or two, some very beautiful specimens have been exhibited before the Massachusetts Horticultural Society, and greatly admired. In general appearance, the Florence resembles the Bigarreau, but it is larger than that variety, and more obtusely heart-shaped. It must be considered an indispensable addition to every good collection.

Fig. 36. Florence Cherry. The tree is of a spreading habit, similar to the Bigarreau; wood yellowish; leaves rather large, oblong, tapering to the point, waved on the margin, moderately serrated, with prominent veins beneath; petioles short, with reniform glands.

Fruit, large, about one and an eighth of an inch in diameter, and one long: **Form**, roundish heart-shaped, flat at the base, and depressed at the apex, with an indented point: **Skin**, pale amber, beautifully mottled with red in the shade, and of a bright red in the sun: **Stem**, long, about one and a half inches, slender, and inserted in a broad shallow cavity: **Flesh**, amber-colored, firm: **Juice**, abundant, sweet, rich, and delicious: **Stone**, small, roundish oval. Ripe from the middle to the end of July.

5. BLACK EAGLE. Hort. Soc. *Catalogue*, 3d Ed. 1842.

The Black Eagle, (*fig. 37*,) according to the *Transactions* of the London Horticultural Society, was raised "by Miss Elizabeth Knight, of Downton Castle, about the year 1806, from a seed of the Ambreé, which had been fertilized by the

pollen of the May Duke." Though produced so long since, and introduced into our gardens many years ago, it has not yet been produced in sufficient quantity to be found in our markets. It is one of the very finest of the early cherries, ripening soon after the May Duke, an abundant bearer, and, in the richness of its flavor, and the tenderness of its flesh, is surpassed by no other variety.

Tree spreading; wood strong, dark brown; leaves oblong, acuminate, waved on the margin, doubly serrated, and pendulous; petioles stout, with reniform glands.

Fruit, medium size, about one inch broad, and seven eighths of an inch

long: *Form*, roundish heart-shaped, depressed at each end, with a deep suture all round, and a large and distinctly indented point at the apex: *Skin*, dark shining red, nearly black when fully mature: *Stem*, medium length, about one and a quarter inches long, rather stout, and inserted in a moderately deep open cavity: *Flesh*, dark purplish red, slightly firm, and very tender: *Juice*, abundant, rich, and high-flavored: *Stone*, roundish, rather small. Ripe from the first to the middle of July.

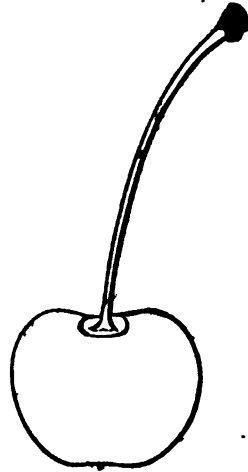


Fig. 37. Black Eagle Cherry.

6. DOWNER. *New Am. Orchardist.*

Downer's Late. *Fruits and Fruit Trees of America.*

Downer's Late Red. *Pom. Manual.*

Few of our American cherries hold so high a rank as this, (fig. 38.) It was produced from seed by Samuel Downer, Esq., of Dorchester, upwards of forty years ago, and the old tree, which stands where it sprung up, is now in a vigorous and healthy condition, never having failed to bear a fine crop since it first fruited. It is one of the most saleable cherries in our markets, and always commands a high price. Its handsome appearance, uniform size, tender flesh, and high

flavor, place it among the best cherries which enrich our collections. Mr. Downer informed us, some time since, when we visited his garden to see the original tree, that he had seedlings of the *third* generation, and, though each of them were good, nearly resembling the parent, neither of them quite came up to it.

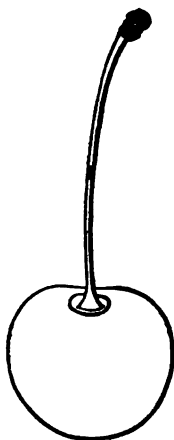


Fig. 38. Downer Cherry.

Tree partially spreading; wood pale brown; leaves, oblong, acuminate.

Fruit, medium size, about seven eighths of an inch broad, and three quarters of an inch long: *Form*, roundish heart-shaped: *Skin*, clear light red, of a semi-transparent appearance, and beautifully mottled with amber in the shade: *Stem*, medium length, about one and a half inches long, rather slender, and inserted in a small shallow cavity: *Flesh*, dark amber-colored, very tender, and melting: *Juice*, plentiful, brisk, sweet, delicious, and high-flavored: *Stone*, small, roundish oval. Ripe from the first to the middle of July.

ART. II. *Descriptions of two Varieties of Apples, with engravings of the fruit.* By T. S. HUMBICKHOUSE, Coshoc-ton, Ohio.

Summer Sweetling.—This (*fig. 39*.) is one of the Marietta apples, being found in all the old orchards on the Muskingum in company with the Rhode Island Greening, Roxbury Russeting, &c. Hence, though nothing further of its history is known to me, its eastern origin is inferred. Most likely, it was brought out from Connecticut, but it is not described so as to be recognized in any pomological work that I have examined. It is the earliest of the early sweet apples, and a great favorite. The *Size*, is about medium—hardly so large as the Early Sweet Bough which I have also before me: nearly round, always fair and uniform in shape and size:

pale greenish yellow, with many opaque, greenish, or white dots obtruding to the skin out of the surrounding clearer and more transparent flesh: Calyx, closed: Stem, slender, and rather long: Flesh, at maturity very tender, juicy, and sweet, and entirely free from the astringency of some sweet apples. Season, middle of July to August. The tree is a thrifty, upright grower, apt to fork four or five feet from the ground, and send up three or four erect and equal sized branches.

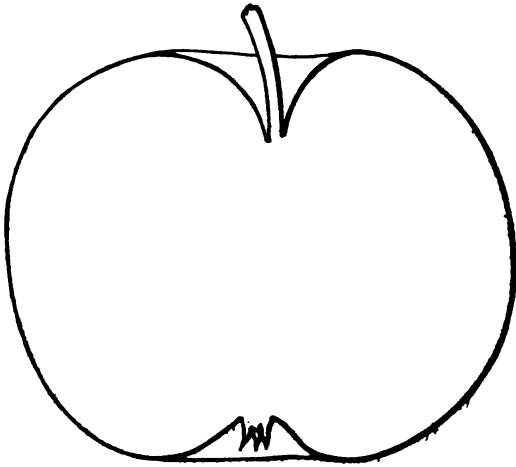


Fig. 30. Summer Sweeting Apple.

The above description is made with the fruit before me, taken from a young tree now in its third season of bearing, but differs as to the form, and time of ripening, from my recollection of the fruit as seen in former years in Mrs. Monroe's orchard, at Wakatomica, upon old trees; according to which, its shape would be somewhat pointed towards the blossom end, and its season fully two weeks earlier.

June Apple.—Size, medium, nearly round, but varying much in shape, being often ribbed, the ribs swelling out broadly but not very prominently, and extending from the stem to the eye: irregularly striped, and mottled with red on a green or yellow ground, red being the prevailing color: Calyx closed: Stem, short, thick, and fleshy: of an agreeable, sprightly, and delicate subacid flavor, perfumed: be-

comes mealy when overripe, and is then apt to burst open. Ripens before the Early Harvest is done, and continues a week or two longer than that variety, to which it is nearly if not

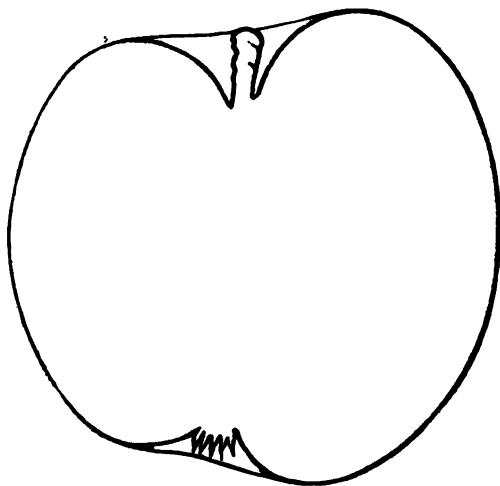


Fig. 40. June Apple.

quite equal in quality, (*fig. 40.*) The tree was procured from Wood's nursery, at Smithfield, Ohio, is a thrifty grower, and, so far, only moderately productive.

Coshocton, Ohio, July, 1848.

It is well known that many of the varieties of apples cultivated at the west, as seedlings, have proved to be old kinds carried from the east, and the object of Mr. Humrickhouse, in his descriptions and engravings, is, to discover how many of these supposed seedlings, generally cultivated, can be identified, that they may no longer be disseminated under erroneous names: one of the above kinds, it is almost certain, was carried from the east, though Mr. Humrickhouse, who has good authorities at hand, cannot identify it with any published description.

Now we suspect that the variety described as the Summer Sweeting, is the old and well-known *High Top Sweeting*, formerly very extensively cultivated in the Old Colony, where there are now hundreds of trees of great age, and in full bear-

ing. We write this with one before us, gathered from an old tree in Sandwich, where there are numerous orchards, wholly of this apple, which now hang (Aug. 16,) full of the golden fruit. Dr. Thatcher, in his *Orchardist*, described it, and remarks that it is "believed to be peculiar to the Old Plymouth Colony," but, whether a native, or introduced, he does not state.

Mr. Humrickhouse's description of the Summer Sweeting answers in every particular to the High Top Sweeting now before us: but it will be noticed that, after the description, he notices the habit of the tree, viz., that it is an "upright grower, apt to fork four or five feet from the ground, and send up three or four erect and equal sized branches." Dr. Thatcher says, the High Top Sweeting "is remarkable for its long, upright stem." The High Top takes its name from the loftiness of the tree, which, compared with the Baldwin, and Roxbury Russet, is twice as high. It is also remarkable for throwing up three or four equal sized branches: we particularly noticed this in several trees in an orchard which we examined last week, where no limb could be reached short of ten feet.

The June apple we do not exactly recognize; it answers, however, very nearly to the Summer Pearmain, which Coxe says "frequently cracks open on the tree, and bursts from its own weight in falling." We should not be surprised if it should prove to be the Summer Pearmain.

Mr. Humrickhouse, as well as other pomologists, who possess the two varieties which he describes, will, we hope, examine them carefully, and, if possible, compare the fruits as well as the trees with those we have named; their identity may then be determined.—*Ed.*

ART. III. *Notice of a New Native Pear called Pendleton's Early York, with a Description of the Fruit.* By C. H. PENDLETON, Pendleton Hill, Ct.

KNOWING that one object of your excellent journal is to disseminate information with regard to any thing new in the

pomological world, and believing that its readers would be pleased with an account of any new variety of fruit that gives promise of gratifying the taste, I take the liberty to give you a description of a seedling pear, (*fig. 41.*) raised in our neighborhood, which bids fair to eclipse the Madaleine, and other pears, ripening contemporaneously with it. The reason that this pear has never been introduced to public notice, is, because the people in our section (southeastern part) of the State take comparatively but very little interest in the cultivation of fruit. I hope the day is not far distant when there will be a decided improvement in this respect.

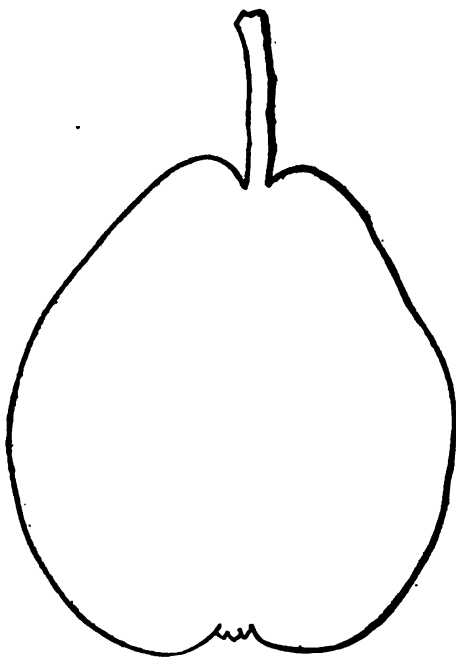


Fig. 41. Pendleton's Early York Pear.

The tree was raised from a seed of the Rousselet Hatif, or Early Catharine, by Mrs. Jeremiah York, who is now nearly eighty years of age, and who planted it, I believe, more than twenty years since. Although the tree is small, and does not exceed ten or twelve feet in height, yet it has borne, for a

number of years, very bountifully, so much so, that it has very much impeded its growth. Instead of cultivating the tree and thinning the fruit upon it, as should have been done, recourse has only been had to propping up the branches, to enable them to sustain the weight of fruit.

The tree is naturally rather vigorous, I conclude, from the one or two examples in which it has been grafted: the young wood is a dark olive: the leaf, which is nearly of a grassy green color, is very large, regular, and glossy, and forms the most striking and distinguishing characteristic of the tree, and is well calculated to excite the amateur's curiosity.

The fruit, which partakes somewhat of the flavor of its parent, is decidedly superior to it, whether we regard its size, flavor, texture, general appearance, or time of ripening, which is a fortnight earlier. Nor does it commence decaying at the core when overripe, like its parent, (judging from what specimens I have seen,) but, like the Bartlett, which it somewhat resembles in color, begins on the surface.

Fruit, rather large, obovate, varying to obtuse pyriform: *Skin*, smooth, thin, pale, greenish-yellow, dotted with small russet specks, and, in exposed specimens, occasionally exhibits a faint blush: *Stalk*, about an inch long, rather curved, and placed in a moderate cavity: *Calyx*, (with short segments,) open, small, tinged beautifully with a delicate red, occupying a rather small, irregular basin: *Flesh*, light-colored, tender, rather fine-grained, and melting: *Flavor*, sweet, sprightly, agreeable, and slightly perfumed. Ripens from the middle to the latter part of July.

I send you an exact outline, drawn from the last pear taken from the tree on the 4th of August, which was then ripe.

Should you deem the description of this pear worthy of insertion in your journal, by forwarding the number containing it, you will confer a favor on your friend, which, I trust, will not soon be forgotten.

If you please, you may designate the pear by the name of "PENDLETON'S EARLY YORK." Another year, if an opportunity occurs, I intend to send you specimens.

Pendleton Hill, Conn., August 22d, 1848.

ART. IV. *Bloodgood and Belle de Bruxelles Pear.*

By R. W. S.

WITHIN the last few days, I have had frequent opportunities to taste and compare the *Bloodgood* pear with other varieties: although it has sometimes a *compound* flavor, which, to some few persons, is not agreeable, yet it must and will be ranked among the best early pears, "deserving a place in the smallest garden." It is usually ripe in Boston and its vicinity from the 10th to the 25th August, say ten to twenty days before the Williams's Bon Chrétien or Bartlett. I must acknowledge that I have heretofore entertained some doubts whether the *Bloodgood* would fully sustain the reputation that some cultivators and nurserymen have claimed for it, but, after several years' trial, under favorable and under unfavorable seasons, I am ready to place it among the very best early pears.

The *Belle de Bruxelles*, or, as I have always received it from France under the name of *Belle d'Août*, is an old acquaintance. I have again and again said, "cut it down," but still the "outcast" has made friends, who have been ready to plead its cause, and vouch for its being "unsurpassed by any summer pear of native or foreign variety!" It has, in this manner, found its way again into good company, again to be "thrust out."

The moment I cast my eye upon the 445 and 446 pages of the first volume of the *Horticulturist*, I said, there is a correct outline of one of the most worthless and deceptive of pears. Mr. Barry has so truly and faithfully described it, *except as to its flavor*, that it can scarcely be mistaken. I will venture to give a new version, and leave it with your readers to form their own conclusions. *Flesh*, white, coarse-grained, astringent, and ill-flavored, having nothing but its size and beauty to recommend it, being totally worthless for any other purpose than to look at or to sell.

Roxbury, August, 1848.

We were quite surprised to find the *Belle de Bruxelles*, which we have fruited these four or five years, so much overrated.—*Ed.*

ART. V. *The Cultivation and Treatment of the Double Varieties of the Chinese Primrose.* By JOHN CADNESS, Brighton, Mass.

DEAR SIR,—As this is a time when it is important that every possible preparation should be made for ornamenting the greenhouse and conservatory for the winter months, every plant being valuable that will flower freely at that season, and as any addition to that class is a matter of much interest to the floricultural world, I do not know that I can direct your attention to any that are more so, at the present time, than the double-flowered white and purple Chinese Primulas: plants which, for their neat and elegant habit, profusion of bloom, and the length of time they keep in flower, have but few equals; in fact, I know of no plants that will give and keep up such a mass of flowers as they will through the whole winter season.

I believe they are not yet very common, and I think but little is known of their real merits; I thought, therefore, a few remarks upon the culture and propagation of plants so desirable, would not be uninteresting to your readers, especially to that portion of them to whom it a desideratum to obtain, and keep up, a good show of flowers during the winter months; to such, these plants will be very valuable. They are of easy culture, and any one, that will be guided by the few plain directions I have to give, respecting their management, cannot fail to grow them successfully.

Plants of the double Primulas, imported from Europe, came into my care about the middle of February, 1847. They were, like most plants of a like perishable nature, in a very poor state after crossing the Atlantic, but, with a little care, they soon commenced growing, though at first but very slowly, when I repotted them into a very light, rich earth, shaking as much as possible of the old ball from them; in a few weeks they commenced growing vigorously, and sent up large flower-stems in abundance; when, after treating myself and a few others, for the first time, with the sight of a double-flowered Chinese primrose, I cut out all their flower-stems, and gave them the advantage of the lightest and best-

aired part of the greenhouse, where they grew and exhibited as fine and robust appearance as I could wish. They now received the ordinary daily attention which the other plants did; but, whenever a flower-stem made its appearance, it was pinched out, in order to throw all nourishment to the development and support of the young shoots.

About the middle of May the plants were placed in a cold frame, and exposed to the sun and air as much as possible, and also a less than usual quantity of water was given them, in order to ripen and harden the base of their stems.

In about two weeks, I cut them all down for the purpose of propagating them, and, as I consider that is the most difficult part of their management, I may as well treat of the course I pursued here. Being anxious to increase them to the utmost extent, I cut off every shoot from the plants, giving to each cutting but a small portion of the hardened and old part of the stem, being desirous of preserving the old stool; having cut off all unnecessary foliage, I plant them in as small pots as convenient, singly, being careful to insert them as shallow as possible, and placing around them three pegs to steady and keep them in an upright position until they have rooted, and can support themselves; water them thoroughly, and, after letting the foliage dry off, place them under glasses, in the propagating-house, or in a cool frame, where great care will be required in airing and watering them; for, where the shoots are strong and luxuriant, they are extremely liable to rot off, especially if they have not previously been well exposed and hardened. Under favorable circumstances, they root very quickly, about ten days being ample time for that purpose, unless they have been allowed to dry up too much, and flag, which extreme must be guarded against as much as the other, too much moisture; less luxuriant, and weak stunted shoots, are managed with less difficulty, but, in all cases, excess of moisture must be strictly guarded against.

After the cuttings have rooted, they will commence growing, when they should be repotted, introduced into the greenhouse, and finally to the open air, into some rather shaded situation; they will, from the time they first commence growing, send up flower-stems, which should be pinched out, as this will greatly increase the strength of the plants. It ap-

pears to be the disposition of both these plants, to develop alternately a new leaf, and a flower-stem; but they should never be allowed to flower out of their season, which is in winter; for, if they do, it will weaken them so much that it will be impossible to get up a fine specimen. The old stools, after being cut down, should be placed in the propagating-house, and kept rather dry until they show signs of breaking; after they have developed a little foliage, they should be repotted into as small pots as possible, without reducing the old ball too much, and receive the same treatment as the young plants, when they will make good specimens for the winter following.

As to compost, I think they require a richer soil to grow them well, than the single varieties; in fact, there is no more difficulty in growing them than the single kinds; more than this, they are such abundant flowerers that they would run themselves entirely out by flowering, if allowed to do so; therefore, to keep up a sufficient growth, they must be deprived of their flower-stems whenever they appear at a season when they are not wanted to bloom, especially in young plants. First encourage a strong, luxuriant growth, and then regulate their flowering according to their strength. About the end of August or beginning of September, I repot my specimen plants, and remove them to a frame. Keeping them close to the glass, and supply freely with air, until it is necessary to remove them to the greenhouse, about the middle of October, where, if they have been potted in a good rich compost, and properly cared for, they will soon send up strong trusses of flower-buds, and will continue to do so until the May following. The plants which I exhibited at the Massachusetts Horticultural Society in February would have made a respectable appearance the first Saturday in May.

The compost I have used has consisted of equal parts of light sandy loam, leaf mould about one year old, and very rotten manure. I was not sparing of the manure, or occasional waterings of liquid manure, which will be found to benefit the plants while flowering.

Brighton, August, 10th, 1848.

It is quite unnecessary for us to commend the article by Mr. Cadness, who is well known as one of our most success-

ful cultivators. The plants which he mentions as having exhibited were in the finest possible condition, with hundreds of flowers, and really the most beautiful plants which the greenhouse affords.—*Ed.*

ART. VI. *Calystègia pubescens, a New Climbing Plant; its Cultivation, Propagation, &c.* By JOHN CADNESS, Brighton.

WHILE I am writing, allow me to introduce, to the notice of your readers, a new and beautiful plant, the *Calystègia pubescens*, bearing double flowers: it belongs to the natural order, *Convolvulææ*, and is distinguished from *Convolvulus* and *Ipomæa*, by the presence of bractæ, and its one-celled capsule. It presents, in other respects, the appearance, and has the habit, of a convolvulus. It is a native of China, and was introduced into European gardens, by the London Horticultural Society.

It is quite new and rare here, but it is a plant which every garden ought to possess; it is a great acquisition to the greenhouse, and it will, I anticipate, be much more so to the flower garden.

It has not, as yet, from any specimens that I have seen, shown that disposition to grow as luxuriantly as others of its tribe; and, until lately, I have looked upon it as a rather delicate plant, and somewhat difficult of culture; but, when we consider how recently it has been introduced, the natural habit of the plant, and the fact that the only method of increasing it has been by cuttings, and that plants thus raised require at least two seasons to form roots of sufficient strength to make good plants, it will not be surprising that we have not yet been able to grow the *Calystègia* to any thing like perfection.

The plant is a perennial, and forms, when in suitable soil, long, semi-tuberous roots, in great abundance, which can be divided to any extent, and which is the natural way of propagating itself; therefore it will be evident that, in order to have a fine plant, we must first be provided with good strong

roots, which we might expect to have, if grown in a pot, and raised from a cutting in the second or third year.

I received a plant from Europe, in the spring of 1847, which grew rather poorly the first season, and only gave about a dozen flowers; this year, I had a good show of blossoms, and I consider it one of the most delicate and beautiful climbers we have. To grow it well, it requires a very rich soil and plenty of pot-room, and to be freely supplied with water when in a growing state. The compost I have used has been equal parts of a rather strong loam and leaf mould, with a little very rotten hotbed manure and sand: in this, it has grown well, and I find the pot well filled with fine strong roots, of the thickness of a pipe-stem, presenting a very different appearance to what they did last year, and, I doubt not, another season, I shall have a fine specimen. It is a very abundant bloomer, and bears flowers of a very pleasing color, a light pinkish rose, which, however, deepens when grown in the open air.

I have several planted out; they have grown well, and some of them have over fifty flowers and buds upon them at this time. They were cuttings raised late last year, and they have done quite as well as I could expect: they are forming fine roots for another season, and I am satisfied it will be a very useful and highly ornamental plant, easily cultivated, either in pots, or out in the open ground, when a good stock of roots, of sufficient strength, shall have been raised. Plants grown in pots, if properly treated, flower for a considerable length of time during the summer; a plant that I exhibited in June is still in flower, but will not continue so long. After flowering, they should be placed out of doors, and, in autumn, gradually dried off, when they should be put away for the winter in a perfectly cool place. Young plants, and especially those raised from cuttings late in the season, will require to be kept growing as late as possible; for, if the root has not acquired sufficient substance before moisture is withheld, they will dry up and be useless. It is a great favorite with the red spider, and, consequently, this troublesome insect must be carefully watched, and not be allowed to injure the plants.

For planting out, the soil should be made rich, and a rather

moist situation chosen if possible, and, if necessary, must be plentifully supplied with water until it becomes well established. The roots should be planted as early as possible in the spring, and, if good strong two year old ones are selected, they will form a most beautiful object trained over a trellis of any description. The roots, when taken up in the fall, which should be done before danger of frost reaching them in the



Fig. 42. *Calystègia pubescens.*

ground, could be kept in sand, in a cool place, until wanted again in spring. It would be well for those who can spare a plant or two, to leave them out for the winter, giving them a slight covering of leaves, as I should not be surprised to find that the roots will stand the winter with a little protection. I shall try the experiment.

The calystegia can be easily propagated by cuttings, but

the best way is by a division of the roots. Of course, where it is an object to get up a stock in a short time, both means can be used. I have observed that all the roots of any size are furnished with buds, a little more than an inch apart, very similar in appearance to the eye in a potato, and, whenever it is required to increase it to the utmost extent, these roots, when ripe, could be cut up into cuttings containing one eye each, and planted in a mixture of sand and leaf mould, or any light soil, to the depth of an inch; carefully watered, they will strike very easily; this could be done any time from January to April.

Brighton, August 12th, 1848.

In the spring of 1847, we had this beautiful plant in flower, and have several times alluded to it in our last volume, (XIII. pp. 78, 359, 497,) and we were just upon the point of writing an article upon its cultivation, when the excellent communication of Mr. Cadness came so opportunely to hand. As we had contemplated accompanying our article with an engraving of the flower, we now append it here, (*fig. 42.*) We are confident, ourselves, it will prove a valuable acquisition, particularly for the purpose of planting out in summer. At the last page above referred to, we copied an article from Van Houtte's *Flora*, in which he has detailed his mode of growing it in the open air, to which we refer the lover of plants. In the climate of Belgium, the roots endured the winter with a slight protection, and, if they will not stand here, in the latitude of 42°, they undoubtedly will do so south of Philadelphia, where it must become a hardy perennial climber. It is a decided acquisition.—*Ed.*

ART. VII. *Floricultural and Botanical Notices of New and Beautiful Plants figured in Foreign Periodicals; with Descriptions of those recently introduced to, or originated in, American Gardens.*

79. *CAMELLIA JAPONICA* var. *WILDERI*. Mr. Wilder's Camellia. (*Ternstroemiaceæ.*) Garden Hybrid.

Caméllia Wilderi was first described by us soon after its first flowering, some seven or eight years ago, (Vol. VII. p.

25.) The figure of the variety now under notice, as well as that of Mrs. Abby Wilder, was copied from drawings executed by Mr. Sharp, and sent to Belgium last winter. It is stated, in the text accompanying the plate, that the original plant, and all the young stock, with the exception of a single graft, *perished by the hands of an incendiary!* This will probably be news to our amateur cultivators. (*Flore des Serres*, March.)

80. CAME'LLIA JAPONICA VAR. MRS. ABBY WILDER. Mrs. Wilder's Camellia. Garden Hybrid.

Raised about the same time as the C. var. Wilderi. The flowers are double, regularly imbricated, and faintly touched with pale blush. It was raised from C. japonica, impregnated with C. var. Middlemist. It is fully described in our volume for 1846, XII. p. 108. (*Flore des Serres*, April.)

81. CAME'LLIA JAPONICA VAR. GEN. LA FAYETTE. La Fayette's Camellia. Garden Hybrid.

A very showy variety, found, we believe, in the collection of camellias purchased by Mr. Boll, of New York, of J. B. Smith, Esq., of Philadelphia. The flowers are of a deep rose, regularly imbricated, incurved at the edges, each petal having a broad white stripe through the centre. It is a desirable acquisition. (*Flore des Serres*, April.)

82. BIGNO'NIA CAROLI'NÆ Lindl. Lady Caroline's Bignonia. (*Bignoniaceæ.*) Buenos Ayres.

A greenhouse climber; growing four feet high; with white flowers; appearing in summer; cultivated in loam, leaf mould, and peat; increased by cuttings. *Flore des Serres*, 1845, t. 330.

A very beautiful species of the *Bignonia*, with a neat and pretty habit, and fragrant white flowers, which are abundantly produced in long terminal clusters. Its native country is believed to be Buenos Ayres; it was introduced to England in 1842, and first flowered in 1844. It is a fine companion to the B. picta. It grows freely in a light rich soil. (*Flore des Serres*, March.)

83. BE'RBERIS AURAHUACE'NSIS Hort. Aurahuaco Berberry. (*Berberidaceæ.*) New Grenada.

A half-hardy (!) shrub; growing four feet (!) high; with yellow and orange flowers; appearing in spring; cultivated in good rich soil; increased by layers. *Flore des Serres*, 1846, pl. 334.

An elegant shrub, which, it is hoped, will prove hardy in

our climate, coming, as it does, from New Grenada, where it was found by Mr. Linden, growing on the mountains, at an elevation of 9,000 feet near the limits of perpetual snow. The foliage is narrow, of a bluish green, and the flowers, which have a yellow calyx and an orange corolla, are disposed in dense clusters. If hardy, it will prove a great acquisition. (*Flore des Serres*, April.)

84. *ACHIMENES OCELLATA* Hook. Bright-eyed Achimenes. (*Gesneraceæ.*) Panama.

A greenhouse plant; growing two feet high; with scarlet and yellow flowers; appearing in summer; cultivated in coarse peat, leaf mould, and sand: increased by offsets. *Flore des Serres*, 1848, pl. 336.

Another pretty species of the Achimenes, not, however, so beautiful as the *picta*; in some respects, it resembles it, but the centre of the former is of a deep yellow, contrasting strongly with the vermilion of the outer edge. This species was introduced to the Kew Gardens, and flowered, for the first time, last winter. Cultivation the same as the other species. (*Flore des Serres*, April.)

85. *METRODORREA ATROPURPUREA* Fischer. Purple-flowered *METRODORREA*. (*Rutaceæ.*) Central America.

A greenhouse plant; growing two feet high; with purple flowers; appearing in spring: cultivated in rich soil; increased by cuttings. *Flore des Serres*, 1848, pl. 337.

A new and very beautiful species recently introduced, and flowered last year in the collection of Van Houtte, its handsome form, ample trifoliate leaves, and great terminal panicles of beautiful purplish flowers, composed of a large number of small ones, have an elegant effect, and render it one of the most ornamental plants of the greenhouse. It was received from Dr. Fischer, of the Botanic Garden of St. Petersburg, and is believed to be from Central America. (*Flore des Serres*, April.)

86. *BRACHYSTELMA TUBEROSUM* R. Brown. Tuberous-rooted *Brachystelma*. (*Asclepiadaceæ.*) Africa.

A greenhouse plant; growing a foot high; with purple flowers; appearing in summer; cultivated in good soil; increased by cuttings. *Flore des Serres*, 1848, t. 340.

A very pretty plant, formerly known in English collections, but recently reintroduced into the garden of Van Houtte from Africa. It has slender stems, which need a small trellis, and its little purple flowers clothe the stems, contributing much to the decoration of the greenhouse. The roots are bulbous, and after they have done flowering, may be placed away until the return of the growing season. (*Flore des Serres*, April.)

MISCELLANEOUS INTELLIGENCE.

ART. I. *General Notices.*

Top Dressings or Mulching.—Few persons are fully aware of the immense importance of top-dressings. To regard them as merely warding off extreme drought is to take a very superficial view of the affair; their merits may, I think, be classed as follows:—1st. They may be made capable of transmitting a vast amount of food to a suffering tree in a very speedy way. 2d. They retain a steady permanency of moisture, in spite of adverse circumstances, without stagnation. 3d. They are the cause of a series of annual fibres, which are of much importance to tender trees. 4th. By means of such, continued systematically, trees may be planted in shallower soils than without them; this tends to the production of much better ripened wood. 5th. If a check is needed through rampant growth, or the total absence of fruit, the removal of the dressing in summer will supersede the necessity of root-pruning.

With regard to the first point, I may observe, that it frequently becomes necessary during dry periods to apply water to trees in full bearing; indeed many a good crop is lost or stunted for want of a timely application of this needful element. Nevertheless, somewhat depends on the temperature of the water. Cold spring water, applied in considerable quantities to the naked soil, may do more harm than good. It is far better to make use of the mulching as a medium, and to water in a successive way.

To proceed with the second consideration. No person who has used top-dressings will doubt their influence in retaining a permanency of moisture, in defiance of long-continued hot weather. By this medium, a vast amount of nutritious moisture, which would be otherwise dissipated, is reserved for absorption by the upper series of fibrous roots.

In the third place, top-dressings, in almost all cases, excite to the production of abundance of surface fibres of a permanent character, produced in a regular annual series. These are most important organs in several respects, which I will attempt to show in the sequel. In the mean time, I would merely point to one particular circumstance of paramount importance; they tend, in no small degree, to prevent the formation of tap-roots, which are notorious as being inimical to the production of blossom buds.

As to the fourth consideration—the systematic application of top dressings, as obviating the necessity for deep borders, which are but too apt to lead the roots to a depth beyond the agencies of the atmosphere, and to render the tree uncontrollable, I can only say that the question has been a growing one during the last seven years, and that, owing to the free discussion of the points connected therewith, much improvement has taken place, not only in vine borders but in those for other fruits. It is a pretty well attested fact, that the shallower the root the earlier and more profound the ripening period. This idea may of course be carried too far, and trees may be driven from Scylla to Charybdis; but the great evil of the

old system having been over-excitement, through deep and rich borders, it becomes a duty for a while, I conceive, to point to an opposite course. By the systematic application of such, I merely mean that the application of an annual top-dressing, however slight, is anticipated by this system.

Our fifth point refers to the facility afforded by this mode of cultivation for checking undue luxuriance. This will seldom occur where top-dressings are resorted to in a systematic way. Still, in the event of trees thus circumstanced becoming too gross in the young shoots, the mere removal of the top-dressing in early summer will go far towards taming the tree, unless it has formed some tap-roots of most inveterate character.

Having now disposed of the five main points, which form, as I conceive, the principal features in a system of top-dressing, as applied to somewhat shallower borders than were originally in use, I would now beg to offer a few remarks on the propriety of securing a permanency of moisture at the root to certain plants. Every body must be aware that many plants of this habit cannot be successfully cultivated without securing a certain amount of moisture at the root, of a permanent character. The most prominent amongst these are the black currant, the raspberry, and, I may add, the quince, amongst fruit bearing shrubs; and celery and lettuce amongst our culinary vegetables. It so happens that this latter question is interwoven in some degree with the top-dressing affair, at least under my mode of cultivation. Last year, the black currants in this part of the kingdom were subjected to the most severe blight I ever remember; they were devoured by aphides; the leaves were almost entirely stripped from the trees, and the fruit were of course either cast to the ground or withered prematurely. Drought at a certain period was, I am persuaded, the cause of all this; for it ought to be generally known that the black currant has a greater tendency to produce surface roots than any other fruit tree; this of course renders it very susceptible of atmospheric changes, and points at once to a special mode of culture. However, I considered that there could not possibly be a crop in the next season. Having some alterations this spring which brought to hand a surplus of soil, I covered the surface of the black currant roots, five inches in thickness, with this soil. We have had a very fine crop, and the soil is now filled with fibres. The black currant should, I think, be planted in sunken trenches or panels at least nine inches below the ground level; in fact, similar to celery, and in that event would bear a top-dressing of mere leaves or litter of any kind every year, applied immediately after a wet period in the spring. Raspberries are so fond of a permanency of moisture that they thrive to admiration in a bog under some trees, within a short distance of where I write. Indeed, our soil being sandy, I could not obtain full crops until I adopted an annual system of top-dressings. In applying this, my practice is to remove a couple of inches of the surface soil with a draw hoe in December; then to apply a couple of inches of compost, and finally a coating of soil, to prevent loss by desiccation. I never dig over the surface of these things, but use the spade full depth to within a reasonable distance, generally cutting a little off the extreme points of the roots annually; this encourages the surface roots, and

has a tendency to check superfluous spray at the same time that steady growth is ensured, through the medium of the top dressings, and sudden vicissitudes of drought obviated. There is undoubtedly much waste of manure in many cases, extra quantities being often applied when perhaps mere permanency of moisture at certain periods is the desideratum. Of what use would any given amount of manure be to the black currant or celery crop, if the plant is to be subjected to a continual lack of moisture ?—(*Gard. Chron.*, 1818, p. 492.)

Propagation of Pinks, Carnations, and Picotees.—Although the finer varieties of these beautiful flowers require great care in their cultivation, and will often disappoint the amateur, their great beauty will yet insure the patience and skill necessary for their successful growth. I yesterday saw a handful of carnations in a friend's hand, and wondered that efforts are not made to grow them in greater profusion. Many are disgusted with the losses which occur from bad management in their first attempts to get a collection, and give up the pursuit ; but this is not wise. A season or two will make the grower more skilful and fortunate. Seeing these flowers advertised, an amateur orders a lot, and pays perhaps 2*l.* or 3*l.* for a dozen pairs. These come probably from a distance, not in pots, as they ought to do, but with their roots exposed, and before they can be placed in a safe position they have suffered much injury. A wet season then comes on, and the young plants, not being strongly rooted, rot in the ground. If they escape this catastrophe, they often throw up only a miserable flower, unworthy of notice ; no *grass*, as the offsets are technically called, is produced ; and sometimes the original plants will turn yellow and die. When, after all his trouble, the would-be grower finds his dozen pairs reduced to about half the number, he despairs of becoming an adept in the art of flowering these plants, and retreats, leaving the field to more fortunate, because more patient, rivals. Now, try another season at all events, and, without incurring fresh expense, propagate from the stronger varieties which yet survive ; in this way, you will advance more confidently, and at length overcome difficulties which arise from want of experience more than from any peculiarities inherent in the flowers.

Common pinks and carnations are increased easily by cuttings taken off at a hard, well-developed joint, and planted in a shady situation in the garden ; if under a hand glass, success is more sure. But we have known great quantities rooted without that aid, by being preserved for a few days from the sun, and kept moist. The soil should be sandy, and the cuttings fixed in it, so that it shall press firmly upon the cut portion. But this plan will not do for finer sorts of carnations and picotees, and the safer way is to propagate these by layering. So many directions have been given for the performance of this operation, that any thing further on the subject may appear to be superfluous ; but, as amateurs are yearly rising up and commencing their apprenticeship, such information must be continually renewed. The principle of layering is to enable a cutting to take root without its connection with the parent plant being quite dis severed, on the plan in which inarching and similar operations are performed. A cutting often

dies, because, from some cause inherent in itself, or external to it, its power of elaborating sap is not strong enough to enable it to form roots; and this power is increased and rendered certain in a layer, because it derives its juices from the parent plant. An incision is made upwards at a joint, to the extent of about half an inch, and a section of the stalk or stem is thus presented, similar to the portion inserted in the soil in the case of a cutting; only it is half the substance or thickness. This cut portion is then firmly inserted in fine soil, and fastened securely with a peg. The layer then forms roots from two sources,—from its own vital mechanism, as in the case of a cutting, and from the assistance derived from the original plant, of which it still forms a part. When rooted, the layer is cut off and potted, and henceforth its growth is self-sustained and independent.

Where a great number of young shoots are available for propagation, a very gentle heat should be created by means of a bed of leaves or cut grass, on which a small frame should be placed. Sandy soil must then be put in, to the depth of six inches, and the cuttings, with all their leaves, firmly fixed as directed above. The glass being put on, the frame should be kept close for a week, and shaded for a day or two; and solar light being gradually admitted, the young plants will form roots more rapidly than in the open ground. Extremes of drought and moisture must be carefully avoided, since the one will rot the plants at the cutting, and the other will cause the soil to contract and leave the cutting bare. Failures must be expected at first, but soon as great a certainty will characterize these operations as most others. This is the proper time for pursuing either of the above methods.—(*Gard. Chron.*, 1848, p. 492.)

Propagation of the Hollyhock.—Of late years, the hollyhock has assumed a prominent place in the flower garden, especially in the south of Scotland, and, as this plant is very ornamental, both for the garden and the shrubbery, I send you the mode of propagating it, which I have found to be very successful, and at the same time very simple. In the month of July, or beginning of August, take a stem of the sort you wish to increase, and having divided that into lengths of two inches each cut, including an eye or bud, slice the stem through the middle and pare the central pith entirely out, so as to prevent rotting, leaving about three inches of the leaf-stalk remaining at the bud, in the manner of fruit-budding; having prepared a little sandy soil suitable for striking cuttings, these buds are to be inserted therein horizontally, about one inch below the surface, the leaf-stalk protruding as an index of position; a hand-glass is then put over them, and in a few weeks they form nice little plants, like the current year's seedlings, and flower luxuriantly the following season, if properly treated.—(*Gard. Chron.*, 1848, p. 493.)

Disbudding Fruit Trees.—A friend of mine, whose attainments in gardening are of no mean cast, although merely an amateur, complains that the subject of disbudding, as applied to fruit trees in general, has not, as yet, been treated of in a satisfactory way; mere dry rules will not suffice, reasons are required. He complains that even gardeners are not agreed as to the extent to which such operations should be carried. This is cer-

tainly true; but we of the crooked knife are but on a par with doctors in such matters. The immediate as well as ultimate influence on the tree of such a denudatory process is indeed very considerable; no wonder that mistaken notions should prevail. And I am sorry to be obliged to confess that such, together with an unusual pressure of business in modern gardening, have, in the main, conspired to defeat the attainment of a system which shall supersede the necessity of mutilating processes; for such are ringing, root-pruning, &c., all which must at times be borne as necessary evils, but argue something wrong in the setting out. Utopian schemes of perfection are, however, not of a sublunary character, and, of course, no more to be expected in gardening than in any other art. Out-door gardening must ever be liable to change, from the vicissitudes of the season; and we must therefore deal with such affairs as we find them, and waive for the present all ideal perfection.

It should be borne in mind that every cut with the knife, and every pinch of the finger and thumb, technically termed "stopping," exercises, for a time at least, a corresponding amount of restriction on the root. Indeed, it would be no difficult matter to convert a young forest tree into a mere bush by commencing and rigidly pursuing such a course for the first seven years of its life.

One of the first points to appreciate, with regard more especially to trained trees, whether by the fan mode or horizontally, is the continual tendency of the main leaders of such trees to establish a new leader in the most perpendicular direction, or where the most spacious sap vessels exist. This is of course a mere consequence of an immutable law of nature, which in the main impels the shoots of trees upwards. Now it is perfectly obvious that when the main flow of sap obtains a new channel of this description, such must be at the expense of the buds; and more especially the fruit situated near the terminal points of the horizontal or fan branches. The Winter Nelis pear and the Passe Colmar, are pretty good instances of this habit. It is pretty obvious then, I think, that the first act of disbudding should commence with these decoys. The season being young when this operation becomes requisite, all further disbudding should stand over until midsummer, when I hold it absolutely necessary to proceed in a progressive way, with the other portions of the tree. The next point is, to go over the whole of the leading shoots, and remove all over-luxuriant spray, without exception; leaving, perhaps, a couple of leaves at the base of each spray. The amount removed will in ordinary cases comprise about one half of the young spray; this however depends on the character and age of the tree, for, in the case of one old or hard worked, I hold it essential to permit a much greater amount of shade through the instrumentality of newly made wood; indeed close stopping with such trees would soon destroy them altogether.

Exceptions must however be again made here, as to the habits of the tree in question; for in running the eye over our orchard or kitchen garden fruits in general, two distinct groups will present themselves,—the one bearing in the main on natural spurs, the other chiefly on the young wood.

These broad distinctions must of course be kept in view at all times. Again, even in one family—for instance, the apple—one kind will bear the finest fruit on the last year's wood ; and the fructification of such wood is in proportion to the amount of grossness. An illustration of this will be found in the Mank's Codling. The nonpareil class, on the contrary, generally produces on the spur.

I am now, however, treating of over-luxuriance as an evil. This forms the rule and requires most elucidation. To return, then, to my point of digression, the removal of all the over-luxuriant spray about midsummer will be found to control, in a very powerful degree, the undue action of the root. Some of the embryo fruit-buds may be excited into wood, especially in showery weather ; this, however, must be borne ; for those that remain unexcited will be found much strengthened, and to develop a much more perfect blossom in the ensuing spring. We frequently see imperfectly formed blossoms on tender fruit trees in the spring ; and why ? because the embryo blossom-bud never received its necessary amount of light during its organization. It is not so much heat of which an increased amount is requisite, but light. Some good-natured country folks think this is carrying an idea too far ; rather too philosophical, they think. The writer, however, with all due respect, thinks differently. Instance the melon : it is very probable that the Persian melons enjoy as much light in one day in their own climate, as those in the murky skies of Britain do in a week. To be sure, a bright sunny day in our own climate is light enough for any thing, but behold how many cloudy, drizzly, or rainy days, may be placed against such a state of weather. The tender incipient buds of fruit-trees, natives of brighter skies, become what is technically termed "drawn" when smothered with young spray, and hence the abortions and malformations of the succeeding spring. A midsummer's disbudding will not, however, complete all that is necessary ; a stopping in addition is, in most cases, necessary ; 1st, it seems to concentrate the powers of the tree, thereby producing fruit of a larger character ; 2d, it tends to equalize strength in trained trees, provided the most luxuriant alone are stopped ; 3d, it tends to ripen the individual shoot acted on ; and 4th, it exercises a farther amount of control over the wayward root ; which, in the case of the peach or nectarine, frequently impels the young shoots to a September growth. I need scarcely urge that such cannot possibly benefit the tree.

The vast difference, therefore, between a course of summer's pruning, and that of the winter, should be kept steadily in view by young aspirants in fruit culture. A severe winter's pruning excites to wood ; that of the summer ultimately checks such a tendency. Our spur-bearing fruits are in general much injured by succulent spray ; and it should be borne in mind that the wall tree receives in the main less light in the aggregate than the ordinary espalier. This may appear a very disputable matter to some persons ; but I feel persuaded that such is the case, more especially when we consider that the root in the former case is generally so placed as to receive a greater amount of nourishment,—that is to say, in proportion to the amount of perspiratory surface of leaf. The ordinary standard grows,

perspires, and, of course, elaborates uncontrolled from a much greater amount of leaf; whilst the severe curtailment necessary with the wall tree, destroys in a considerable degree that reciprocity which should exist between the absorbing and elaborating powers. I must postpone further remarks on this interesting subject to another occasion.—(*Gard. Chron.*, 1848, p. 436.)

Bone-dust a good Manure for Shrubs.—A day or two ago I was remarking on the great growth of the shrubbery of a clergyman in this neighborhood, (lately deceased,) and expressing my astonishment at the luxuriance which the shrubs had attained in the short time since they were planted. The person said that the clergyman had told him that "he had superintended the planting himself, and that he had put a handful of bone-dust under every tree and shrub, (which amount to some thousands,) and to which alone he attributed the great growth they had made." I planted myself about 700 ornamental shrubs and trees about the same time, and although I spared no trouble or expense in my work, (having drained and thoroughly trenched, and made my ground that I could easily thrust a stick full two and a half feet deep into good open soil, and also superintended myself every tree and shrub planted, for which I am now amply rewarded by the great growth and beauty of the entire shrubbery, which is the admiration of every one who sees it,) still I think that my shrubs are full a good year's growth, in point of size, behind those to which I allude, having had bone-dust used with them, and with equal advantage as to soil and situation also. And I should state that mine are nearly double the size of some of my neighbors', planted about the same time. Now as I intend planting, to some extent, in September, I have ventured to trouble you with this, to ask your opinion as to the advantages of using bone-dust or any other material, likely to accelerate the growth of shrubs; and to ask you to state which is the most desirable way of using it; whether it should be put under the roots, or thrown in amongst them while planting, or mixed up with the top soil after the planting is completed.—*A Subscriber*. [There is no doubt about the advantage of bones dissolved in acid; we have frequently recommended superphosphate of lime, which is the same thing.] (*Gard. Chron.*, 1848, p. 437.)

Best method to have a succession of fine fresh Cauliflowers through the winter months.—I have never seen or heard of this most delicate of all the brassica tribe being managed so as to have them flowering fresh in succession during the winter months, until the easy means of doing so suggested itself to me, during my residence at Welbeck Abbey, with the Duke of Portland. I found that it was a favorite vegetable with his Grace, in preference to the best and finest white, or any other broccoli, which he could discover by the smell as soon as he entered the dining room, and so unpleasant was the latter to him, that he ordered it to be carried out of the room. After he informed me of this, it suggested itself to me that there could be no difficulty in having the delicate cauliflower fresh, sweet, and fine, in regular succession, through the winter, instead of following that disgusting practice of housing the latest Michaelmas cauliflower as it comes

into head, before frosts set in ; either hanging or laying it in sheds for protection, which, when required for the table, after having been hung or laid in for some time, can only be rendered palatable by cutting them off from the stalks on the previous day, and throwing them into cold water, frequently changing it, until they are wanted ; in this way, the heads, by absorbing much of the water, become plumped up, and the strong disagreeable smell and taste they acquire in the shed is in some degree taken off. But even under the most careful treatment, by this practice, they lose their fine white cauliflower bloom, and, when brought to the table, their appearance is dark and unsightly, and often disgusting, so that any hardy branching winter broccoli is far preferable.

The following method succeeded so well, that, by practising it, I had plenty of cauliflower for the whole family, and it became such a favorite that I declined growing so much broccoli, but just to supply any deficiency which might arise between the going off of the winter, and the coming in of the hand-glass crops, and lest the drought of spring and early summer should spoil the first planted out crop. This is often the case, and then the seedsmen are blamed for sending bad seed, notwithstanding that it is a consequence of the season, and cannot be avoided by all the care and attention the gardener can bestow. In this case, in large establishments, it is quite necessary to be prepared with a supply of a tolerable substitute in broccoli.

My method is to sow the seed in successional small sowings, according to the requirements of the family, from the end of June on to the end of July, and to get all my plants as strong and vigorous as I can before frost sets in. It is better that none of these should show heads when taken up for protection. Those of the May and early June sowing, if planted out upon rich north borders, become fine, strong, stocky plants, without many showing heads previous to frost setting in ; but they will be the first to head after being laid in the protection ground. As soon as frosty nights are apprehended, I select a spot for laying them into, in beds four or five feet wide, and with alleys about two or three feet, to retain the litter for covering in frosty nights, as well as for the convenience of covering, uncovering, and getting in the crop. They are laid in the ground with their tops towards the sun, if that can be done conveniently, leaving very little besides their leafy tops above the soil, which is made close and tolerably firm about the roots and stems, to keep out mice and rats from them, during the severity of frost, while necessary to retain the coverings for any length of time. Every care must be taken to keep slugs from them, or else they soon spoil their beauty, by eating all over the flowery tops, and bark all their branches ; and for the convenience of inspection, the tops must not overlay each other. It is of the utmost importance to the success of this method that the litter (which is placed in readiness in the alleys,) is never resorted to but when found necessary ; if put over at night when suspicious of frost, take it off with a rake in the morning, if all appearance of frost has disappeared. The thickness of the covering is to be increased or

diminished, according to the apparent inclemency of the weather.—(*Gard. Jour.*, 1848, p. 339.)

Culture of the Camellia.—[In our last two numbers we have given our articles on the cultivation of the camellia, and it will be continued in our next. In order that amateurs may get all the information on the growth of so fine a plant, we copy the following from our English papers.—*Ed.*]

This beautiful tribe of plants has not received much attention from your correspondents. I will, therefore, describe a mode of cultivation which I have seen practised with success.

As soon as the usual flowering season is over, which is about the end of March or beginning of April, repot such of the plants, as require it, in well-prepared compost of good loam, dung, peat, and sand; the quantity of each must be arranged according to the state of the plants, for if the plants have been growing very vigorously, and have not flowered freely, it will be desirable to use about equal parts of loam, dung, and peat soil, and about a fourth part of sand; but, if otherwise, make the compost a little richer, that is, not to use quite so much peat. After the plants are potted, place them in a shady house, fronting the north. If you have not got a house on the north aspect, place them in any other house where you can shade them when required, and where they will be subject to a heat of from sixty-five to seventy-five degrees by day, and from fifty-five to sixty degrees by night. This heat, I think, is far better than greater, during their time of growing, as too much heat at this time has a tendency to render the growing shoots both weakly and short. Always make it a rule to syringe them every morning and evening when in a growing state, and, if the sun shines powerfully, shade them slightly. I have seen them, under these circumstances, to flourish and look far better, both at this time and the time of flowering, than when exposed to the sun's rays during any period of the season. Water them freely, and give as much air as the weather will permit. As soon as the young shoots have done growing, which is easily perceived, raise the heat to eighty degrees by day, and from sixty-five to seventy degrees by night. This increase of heat enables them to form their flower-buds with greater facility and strength, and in far greater quantities. You must particularly observe this increase of heat; it ought to be applied immediately they have perfected their shoots, before they come to a woody texture, for, if delayed until the wood becomes hard, it has not the desired effect of producing abundance of flower-buds. When they have completely set their buds, which will be in about three weeks or a month after they are subject to this increase of heat, gradually decrease the heat until about the end of June, when they will be sufficiently hardy to stand out of doors. Be careful to place them in rather shady situations, for, if placed where they are exposed to the sun's rays, the leaves are not only liable to be blotched and unsightly, but the plants are apt to push their flower-buds prematurely. This is the great reason why the flower-buds fall off without properly coming into flower; too sudden heat causes them to fall and push forward too rapidly; and, on the contrary, a decrease of warmth at that time checks their growth, and in that case causes them to fall. It is aston-

ishing how very easily the flower-buds, when nearly ready to expand, are acted upon by either heat or cold; the variation of only a few degrees will considerably affect them at this time, particularly if it be in the winter season. In the spring, so much care is not required, as in general each succeeding day is a little warmer than its predecessor, but, in the winter months, when the weather is changeable, and plants are only excited by artificial heat, the greatest care is necessary, in order to keep them from advancing too much, and also not to allow the temperature to decrease, for fear of the flower-buds. If it be desired to flower them only in the natural time in the spring months, they ought to be kept as cool as possible during winter, but, as the camellia is so easy of culture, if moderate attention be paid to it, no flowers can be better adapted to bloom during the whole of the winter months, when but few plants cheer us by their expanding blossoms. Every precaution is necessary to prevent worms from effecting an entrance to the roots; if any do find their way, as soon as possible water them once or twice with a weak solution of lime water, which will speedily make them come out. If the weather continues favorable, that is, without frost or excessive rains, do not take them into the house again until October or perhaps the end of September, and keep them in a cold situation till the blooming season.

The foregoing observations apply to plants that are to produce flowers at their usual season, but if they are wanted to flower in autumn or winter, it is necessary they should be put into a growing state at least a month earlier; they should be taken out a month earlier in the spring, and be got out of doors as early as possible in June, when they will be ready to be brought into the greenhouse or conservatory to flower, by the end of September. The heat required to expand the blossom-buds is by day about fifty-five degrees, and by night fifty degrees; if this be attended to, and the atmosphere never allowed to reach a much higher or lower temperature, the plants will continue in flower for a length of time.—(*Gard. Jour.*, 1848, p. 340.)

Cultivation of Melons.—I wish to state, for the information of some of your correspondents, who have on various occasions solicited information on this subject, the system I have pursued with the greatest success, in the cultivation of this much esteemed fruit. There is, perhaps, nothing novel in the system I have pursued, and I would therefore observe, that I do not wish to set it up as a model for experienced and intelligent gardeners. I will suppose that every one who is in the slightest degree conversant with his profession must understand how to manage the seedling plants. When the young plants have formed three perfect leaves I stop them; and having a frame prepared for their reception, with not less than twelve inches of good loam, trodden firmly down; when in a fit state, I turn out the plants, one under the centre of each light. I now select some of the strongest shoots, and train, generally, four each way, viz., to back and front of the frame, not stopping till they reach the outside. The system of pinching and stopping, which I have frequently seen practised, ought to be avoided, as it only tends to engender canker, and impairs the health and vigor of the

plants. I invariably stop the laterals, at two joints beyond the fruit; this prevents confusion, and, provided the natural temperature be properly attended to, tends to expedite the setting of the fruits. I hold it to be good policy, during this critical period, to occasionally sprinkle the interior of the frame, taking care, however, not to wet the foliage, and shut down with a temperature of 85 degrees. Having secured the number of fruit which I deem sufficient for each plant to carry, and which ought not to exceed four, I pursue a different mode of treatment, with regard to air, water, &c. I am not an advocate for an abundance of air, as recommended by one of your correspondents some time ago. I consider that the less air is given, without injury to the plants, the better; and when given at all it should be liberally applied in the morning, say from seven to half-past ten or eleven o'clock, being guided, however, by the state of the weather. At the above-named hour, if the sun is very powerful, I decrease the air about one half, and apply calico, or some other light material, as a shading for a few hours, during the middle of the day. With regard to water, I cannot lay down any definite system for the guidance of others; the operator must be left to exercise his own judgment in this matter. I generally sprinkle the plants every afternoon in favorable weather, and maintain a temperature of 95 to 100 degrees. By pursuing the foregoing method, I never fail to obtain an abundant supply of good fruits, and generally two crops from the same plants.—(*Gard. Jour.*, 1848, p. 340.)

The Hollyhock and its Culture.—The cultivation of this magnificent, though much neglected eastern plant, is of great antiquity. Its majestic height, and splendid flowers, could not fail to attract the attention of our earliest collectors. It cannot be exactly stated when it was first introduced into this country, but Dr. Turner speaks of it as a favorite plant in 1564, and Gerard, in 1597, who says that it was sown in most gardens. These two authors spell it "Holyhock," and Parkinson "Hollihocke." Mortimer, in 1707, in his work on husbandry, retains the old Saxon name Holyoak.

The hollyhock grows wild in various eastern countries. Pliny describes it as a rose growing on stalks like the mallow; and Miller informs us he received seeds from Istria, where it was gathered in the fields, which produced single red flowers; whereas, from seeds produced from Madras, he raised plants with double flowers, of many different colors. It is also a native of the Marootzee country in Africa.

There are few flowers that contribute more to the embellishment of large gardens than this much neglected plant. Its hardy nature and easy propagation have rendered it thus; and, in my opinion, it yields to no flower for grandeur and beauty. When properly attended to, it is a desirable ornament in the borders of the pleasure ground and shrubberies, giving gaiety to all around, with its noble stalks, like so many floral banners garnished with roses of almost every hue, as rose, palest blush, deepest carmine, pure white, yellow, richest orange, the dark and light chestnut, pale and deep reddish purple, and lastly, richest velvety black. The neglect which has attended the cultivation of this and many other old associates of our gar-

dens, (and which I intend to bring before the readers of the Journal,) appears to me to be explained thus:—They familiarly flourish in the humble cottage gardens of the poor, (without whose industrious labor we cannot subsist.) Yet, as I have already said, when properly attended to, dispersed and grouped, they are equally as appropriate for the decoration of the queen's garden as the humble cottager's, and there readily display their eastern splendor; whilst many of our over-much admired tender exotic plants, so eagerly sought after, and for which very high prices are paid, show that they are, as the poet says,—

"Borne from their genial native airs away
That scarcely can their tender bud display."

We must admit that the hollyhock is not altogether adapted for the parterre, from its tall growth, yet, in many cases, it can be there with good effect planted, more particularly when pegged down, as is in many cases adopted with the dahlia. The most fit place for the hollyhock, and its associate, the dahlia, is, unquestionably, in the borders of the shrubbery and pleasure ground. It considerably adds to the beauty when they are so placed as to appear emerging from amongst dwarf shrubs, so that the lower parts of the stalks are not seen. When they require support, they should have each a separate stick, for, when tied up in bundles, which is too often the case, the flowers have not room to display their beauty, and the plant assumes a stiff, unnatural appearance, instead of that careless freedom which constitutes the beauty of plants. The poet, Moore, on this subject says,—

"Yet, in the wild disorder, art pervades,
Designs, corrects, and regulates the whole,
Herself the while unseen."

To give full effect to the hollyhock, it should be planted in clumps, with a single color in a clump, the effect of which is grand. For variety's sake, the colors may be mixed, but the effect, in my opinion, is not so fine. They must not be planted too near each other; the tall ones in the centre, and the dwarfer ones in front. In front of them should be planted the different varieties of fuchsia, and in front of them calceolarias, and geraniums, mixed together, and pegged to the ground.

Some years ago the hollyhock held a higher place in rural economy than its mere beauty, as we find, in the year 1821, about 280 acres of land, near Flint, in Wales, planted with the hollyhock, with a view of converting the fibres of this plant into thread, similar to that of hemp or flax, for making coarse cloth. In the process of manufacture, it was discovered that the plant yields a fine blue dye, equal in beauty to the best indigo.

The seeds should be gathered when ripe, and sown as soon as the season will permit, in beds of light earth, from which the young plants must be removed, and planted in rows a foot apart each way, care being taken to keep them clear of weeds, and, if the season is dry, they should be watered with a little manure-water. By very little care and attention, those that are approved of will be fit to plant out the following spring, when they

will produce their pyramids of countless hues. Those intended for fine bloomers should not be allowed to ripen their seeds the previous year, as by so doing the plant is very much weakened, and the flowers only prove a disappointment.

I trust the above remarks may be the means of bringing this beautiful, but much neglected plant once more before the careful attention of the British horticulturist.

At this busy season of the year, when transplanting, filling up vacancies, making new arrangements, grouping, and many other necessary alterations, to give effect in the flower-garden and shrubbery borders, are going on, it may be well to mention, that few plants, if any, of the same hardiness and habit, are capable of producing such a noble appearance, when planted *en masse*, as the hollyhock. Those who have seen them occupying situations suited to their habit of growth, and planted in soil adapted to their wants—producing, (as they do when properly treated,) large globe-shaped flowers, fully as large as the majority of dahlias, higher in the centre, and very full of petals, and embracing quite as great a variety of color—can only form any just conception of the agreeable appearance they are capable of producing. A great error is committed by many in planting the noble hollyhock to fill up any open vacancies about the shrubberies, without the least regard being paid to the nature of the soil in which they are to be planted. To have these plants produce any thing like the quantity and quality of flowers they are capable of producing under good management, and to retain their freshness and healthiness of appearance, they ought not to be planted in any confined situation, where they would become “drawn,” or grow weaker than they are naturally inclined to do if planted in a bed in the open ground. Neither is a gravelly soil, or subsoil, unless the soil has been lately moved to a good depth, and is capable of supplying them with plenty of good nourishment, suitable for the succulent nature of these plants, and the large size to which they attain in the course of a season, makes it self-evident that they require a great deal of moisture to keep them in proper trim, that is, retaining their foliage, and producing side branches all round the principal leaders, giving to each plant a graceful pyramidal form.—(*Gard. Jour.*, 1848, pp. 324, 325.)

Forcing the Rose.—Suppose we go to the flower-markets for forced roses, we invariably find them very much drawn; the shoots weakly, the stems unable to support the flowers; these have no sooner done flowering than they are almost worthless, and why? Because they have been violently forced. They have been grown in the open ground until the very season they are required to be put out of their way; they are necessarily forced violently, have to do four or five months' work in two months, and, consequently, cannot do it so well. They cannot in two months' driving grow so strong as when they have their natural time to do it in; they are every way depreciated; but let us do the forcing as it should be done, and they will grow as strong and as full of bloom, and be as ready to be forced again seven years running, and improve every year, as if they were in their own open ground. The truth is, that roses want two, if not three,

seasons, to prepare them. Select strong young plants, pot them in strong loam and dung, with good room for their roots; plunge them in the open air until December; now put them in a greenhouse, prune all the strong wood into the lowest two eyes, cut out close all the thin weakly shoots, and see that they have the genial warmth of the greenhouse, plenty of air when the weather is warm enough to do it safely, and water occasionally, and the shoots will soon push strong and well; let any that come out weakly from different parts of the tree or bush be rubbed off, they are of no use, and only weaken those which are. Of course, they will be much forwarder than those in the open air, and especially if the weather be cold; as soon as the buds appear, remove them. The plant must not be weakened by blooming; let there be abundance of water to sustain the growth, and as soon as May is pretty nearly out, plunge them to their rims in the open ground, taking great care that they do not suffer for want of water; when the growth is completed, and the leaves are fully developed, and their shoots at full length, let there be no more water given; the wood will soon ripen, and the leaves will have fallen long before the plants that have been all through their growth in the open air. When the leaves have fallen, the plants may be looked upon as at rest; they may be removed into the shade. In November, the roots may be examined, that is to say, the balls turned out; and, if the roots are matted round the pot, they must be shifted to pots of a larger size, without disturbing the ball. All the strong branches may be again shortened to two eyes, all the weakly ones cut close again; they may be placed in the greenhouse at once, which will be a month sooner than they were the previous year. They will soon start again; they must be guarded from frost, or any near approach to it, as jealously as a tender plant; they will show their buds much sooner this year than they did last, and you would find them, if allowed to go on to bloom, very respectably grown compared to forced roses generally,—but we take off the buds as soon as we can get hold of them, again to throw all their strength into the growth. They will this year be fully established, their growth will be strong, they may be plunged in the open air again at the end of May, and be carefully tended as to water, till their growth is complete, and the leaves are turning; now comes another season of rest, far earlier than they rested last year. In due time, when the leaves are fallen, remove them to the shade again, to abide the period of being set to work; again examine the balls, and if the roots are matted, change their pots to a larger size, keeping to strong loam and dung for their compost. They may be housed this time in October, pruned as before, and allowed to grow; syringe them if there is any appearance of green fly, and if this does not clear them, fumigate them with tobacco-smoke, and syringe them afterwards. They will make rapid advances; let the house be kept through the winter at forty-five degrees in the day, and forty at night; whenever air can be given, and the temperature kept to this, be it so, for they cannot have too much air. The trees or bushes will continue their growth, and go up to bloom without drawing or weakening at all; and when in flower they should be kept in a temperature not exceeding forty-five degrees. It

will be found that these roses want no more support than out-of-door ones in their proper season; and, moreover, they will have now been brought into a regular early growth, which should be kept up; they will have made their growth months before those out of doors, consequently will begin their rest months before them, and the early seasons may be preserved as long as you please. The seasons, with all things, may thus be completely changed.—(*Hort. Mag.*, 1848, p. 316.)

Culture of the Orange.—M. Martine, propagator to Messrs. Knight and Perry, brought forward an Essay on the Culture of the Orange, which, with the exception of a few introductory remarks, was as follows:—What a magnificent sight it is, to behold the majestic orange tree, covered at one and the same time with foliage, flowers, and fruit! Who, without being lost in admiration, can gaze upon its graceful form, its rich looking, lively fruit, and elegant, sweet-scented blossoms, with which latter, in my native country—France—a virgin only is allowed to decorate herself! With these remarks in its praise, I will now proceed to give a few brief directions on its culture, from the time the seed is sown till the plants are four years old. In the month of March, let the gardener, having first got some good lemon seed, make a hot-bed of dung and leaves, which, when firmly trodden, ought to be about three feet deep. Over this, place a frame, and about six inches of compost, mixed in the following proportions:—Three barrow loads of peat, three of loam, two of rotten dung, one of silver sand, and one of common garden mould. Having done this, sow the seeds about half an inch asunder; give a good watering to settle the soil; then put the lights on and cover the whole frame with a double mat, and in this state let it remain for eight or ten days, in order to aid the development of the seed. At the expiration of this time the gardener ought, by degrees, to accustom the young plants to the light, taking care, however, to shade them when the sun is very strong. The heat of the bed must be kept up by linings. For the first year, I recommend that a bottom heat of about eighty-five degrees be maintained. By the month of June the young plants will have attained the height of six or eight inches, and now let them be potted into sixty-sized pots, and plunged in a hot-bed, there to remain for the rest of the summer. In the month of September, take them out of the bed, and put them in a house for the winter, the heat of which must not be lower than forty-five or fifty degrees. 2d year.—I will now suppose that we are in the month of March, that the plants are healthy, and the gardener ready for action; if so, proceed to make a hot-bed, and plunge the plants in the same way as before recommended. Give all the air you can in fine weather, and, by the month of August, you will have a lot of fine healthy plants ready for grafting. The month of August I consider the best month for grafting the orange, and the mode of grafting I consider best is what English gardeners term slit-grafting. For grafting, select the most vigorous plants, and insert the graft in the shoot of the previous year; then plunge them in a hot-bed, prepared about a week previous; after this, shut up the frame, and keep it covered with mats for three or four days; the mats may then be taken off in the evening and put on again in the morning, but I

cannot press too strongly on you the necessity of excluding the sun's rays for eighteen or twenty days after grafting. In the month of October, remove the plants to a pit, there to remain for the winter. The heat of this pit must be kept up with linings, mats, &c. 3d year.—Now, supposing we are in the month of April, eight months after grafting, let the plants be shifted into forty-eight sized pots, and in the following compost:—Three barrow loads of loam, two of garden mould, three of peat, two of rotten dung, and half a barrow load of dried night-soil. The potting finished, again plunge them in a hot-bed, at good distances from each other, to keep them from growing weak; give plenty of air in fine weather; and from June till September take the lights off, (except in wet weather,) to let the plants have all the benefit of sun and air. 4th year.—In the spring of this year I would recommend that the plants be turned out of their pots, and put into square boxes, with peat about two inches high, which I consider superior to pots, because the air has freer access to the roots, and there is less danger of the ball becoming sodden, which is, in nine cases out of ten, the cause of the ill-health and ultimate death of the orange tree. In conclusion, I recommend that pump or spring water never be used for watering with, because such water often holds in solution substances deleterious to the health of plants. Always use rain-water, and try to have it about the same temperature as the ball of the plants. This is what nature gives, not only the orange tree, but the whole vegetable kingdom, and we ought to imitate nature as near as we can in our horticultural operations.

The majority of the gardeners present considered M. Martine's directions excellent, and returned him a vote of thanks. A vote of thanks was also returned to Mr. John Hughes, Jr., for translating the essay from the French.—(*Gard. Jour.*, 1848, p. 294.)

Cultivation of the Cabbage.—Mr. Taylor read a paper on the cultivation of the cabbage. He said that an article in the journal had reminded him that gardeners in general overshot the mark, by paying too much attention to the defining of laws whereby to attain perfection in the higher departments of horticulture; and, in great measure, neglecting the more humble, though not less useful parts. As to the best and simplest means of cultivating the cabbage, he had frequently witnessed in gardens, where every thing was at hand requisite to grow them to perfection, that they were a disgrace to the ground they occupied, not because the gardener was not familiar with their culture, but because they are grown so easily that excellence is never thought of. The kinds of cabbage he preferred were those least liable to run to seed early, and which formed a small head, and as it enlarged, became unfolded rather than split, so that if not wanted for immediate use, it would improve rather than deteriorate. The variety he considered the best in cultivation is the paragon, a name given to it at Paragon Nursery, Brixton Hill; 2d, Atkins's Matchless; 3d, Nonpareil; these three kinds he considered sufficient for any garden, although market-gardeners preferred larger varieties, such as the Battersea, &c. He then described his mode of culture as follows:—From the twelfth to the twentieth of July is the time he usually sows; in about six weeks the plants

will be ready to plant out, on a piece of ground at least two spits deep, and well manured, turning the bottom up, and placing the manure between the top and bottom spit. The manure preferred is that about half rotten, and used from the heap. Manure that has been washed the whole season, in the frame ground, is not good enough. All being in readiness, the plants are put out at about eighteen inches apart, from row to row, so that in the spring every alternate plant may be taken up for a second crop, the moving of which gives the plants a check, and produces a succession. For a later supply he sows about the third week in August; when the plants are ready they are pricked out into a piece of dry sheltered ground, planting them rather deep, to protect them from frost until April, when they may be planted out at their proper distances. Thus the spring and summer cabbage are provided. About the fifteenth or twentieth of May a few more are sown, to plant as vacancies occur, and again in June. This gives a good supply all the season. Several members spoke of the excellent cabbage grown by Mr. Taylor.—(*Gard. Jour.*, 1848, p. 294.)

Cultivation of the Pelargonium.—Those persons who have not had the opportunity of witnessing the superb specimens of the above plants, as exhibited this season at the Royal Botanic and Chiswick Shows, can form no idea of their excellence and superiority over what they were a few years since, and which must reflect great credit on the cultivators of this noble flower. The following mode of cultivating the pelargonium, so as to obtain fine specimens, may, perhaps, be of interest to some of the readers of your widely-circulated journal:—Early in July, I prepare as many cuttings as required, always selecting the firmest of the shoot for this purpose, and such as are shortest jointed, never allowing a cutting to be more than four inches in length. I then insert them in sixty-sized pots, one in each pot, in a mixture of well decayed leaf mould and silver sand, taking care to place them firmly in the pots, and well watering through a fine rose, then plunging in a cold frame, placing them so that they may be about eight or ten inches from the glass, which is kept close, and shaded from the mid-day sun. In about three weeks, they will be sufficiently rooted, so as to be potted off into forty-eight sized pots, in a compost consisting of turfy loam, leaf mould, and sandy peat. I then place them in a sheltered situation in the open air, or in a cold frame, which is most preferable, as affording facility for shading, or security against excessive rains or sudden frosts in autumn. About the middle of September, I remove the plants into the greenhouse or pits, and place them as near the glass as circumstances will admit,—this being a most essential point in the successful culture of the pelargonium. Should the weather be damp at this period, a little fire may be employed during the day to dry up the damp, taking care to give plenty of air at all favorable opportunities. During the months of December and January, they require the greatest attention, as to watering, &c., removing all decayed leaves, and every thing that is at all likely to create damp: cleanliness, at this season, being of the utmost importance to the future well-being of the plants. In the latter end of January, I re-pot the plants into twenty-four sized pots, giving them a good drainage, and using a compost

as before. I then remove them to pits, where they can be placed as near the glass as required, the temperature being raised to about forty-five degrees, so as to induce them to push fresh roots. At this period of their growth, I stop all the main shoots, which induces the plants to become bushy. As soon as the young shoots have grown an inch or two in length, I examine the plants carefully, and remove all superfluous laterals, leaving those only that are best suited for the desired arrangement of the plant. I then take some hooked pegs instead of sticks, with which I secure the plants, and am thus enabled to grow them to the desired form. Early in March, some of the plants will require to be shifted into larger pots, taking care to keep the balls as entire as possible, and watering immediately after potting; for, if the plants are allowed to flag, all the efforts of the cultivator will be entirely blasted. About the middle of April, the plants will require going over again, and thinned out as before, leaving the plants well furnished with vigorous shoots for blowing. I have always found a few waterings with weak liquid manure to be of much benefit to the plants at this stage of their growth. When the weather is warm at this period, a few syringings with water heated to seventy degrees will add much to the health and vigor of the plants. The plants will now begin to throw up their trusses, and ought to be removed to a warm greenhouse, and placed as before, frequently turning the plants, so that they may be uniform in growth, and by no means must get drawn, as then the flower will be thin and weak. Should the weather be very hot at this period, a slight shading will be found of the greatest benefit. When the blooming season is over, I cut the plants down to within three inches of the pot, and, as soon as they have pushed a few inches, they are re-potted, taking care to shake nearly all the old soil from the roots, and planted each in a pot two sizes less than they had been in. By the above attention, I have always been able to obtain plants of the most healthy and vigorous growth, covered with handsome bold trusses of bloom —(*Gard. Journ.*, 1848, pp. 100, 101.)

Vines.—Who that expects to force grapes early will do all at once? But when vines are forced a little earlier each year, and you take several years to bring them forward, a little earlier each season, you can in time bring them to any thing; therefore due regard should be had to doing every thing by degrees. The first year, bring them a month earlier; the second year, bring them two months earlier; and so by degrees you may almost reverse the seasons of a house of vines, and keep them up to it as healthily and as regularly as the ordinary vine in ordinary seasons.—(*Hort. Mag.*, 1848, p. 317.)

Fruit Trees in pots are just the same; when you have, after repeated forcings, brought them to the season you want, they will come to it as regularly as you can wish, and all you have to do is to provide them proper pot-room, and no more. So far from being the worse for forcing, they are the better for it; they rarely miss making and ripening their wood; they seldom fail producing plenty of fruit-buds; and, when set to work at the proper time, seldom fail to produce their regular fruit in season.—(*Hort. Mag.*, 1848, p. 317.)

ART. II. Foreign Notices.

TURKEY.

American Fruits on the Shores of the Bosphorus.—[In the early part of the current volume, (p. 42,) we gave some account of the state of gardening on the Bosphorus, and remarked, at the time, that Messrs. Hovey & Co. had sent to our correspondent some of the finest kinds of fruit trees, intended for the sultan's garden. Recently, we have received another letter from our correspondent, and, although not intended for publication, we do not think he will object to the publication of his remarks relative to the receipt of the trees and plants, and the disposition of them after their arrival.—*Ed.*]

I had the pleasure, some time since, to receive your letter of the 23d of December last, accompanied by the trees which I had desired you to send me. I am very grateful to you for your polite attention to my request, and it may be a satisfaction to you to learn that the trees all reached me in a very short time, and in a perfect state of preservation. They arrived here just when the best season for planting them had set in. I intended them as a small present for the sultan, from whom, during my long residence here, I have received many acts of kindness; and, being desirous of seeing once more something to recall to me the green hills of my own native soil, I took the package myself to his palace. His private secretary had kindly sent for the sultan's chief gardener, who is a German of creditable knowledge, to take charge of the trees, and they were opened in the yard of the palace. I was delighted to find them so well put up; they were nearly all budding, and not a twig or root was injured. I assure you, that I was so much pleased with the sight of so many of my country plants, familiar objects of my younger days, that I felt much like committing the folly of kissing their branches, especially those of the hickory, the sugar maple, and the sassafras. They have all been planted in favorite parts of the garden belonging to the palace of the sultan called "Tcherogian," on the European shore of the Bosphorus; the cranberry around a pond of water, and the fruit-trees where they are protected. His garden is an immense one, and will be in time a noble piece of ground. It costs the sultan a large sum annually. The gardener tells me that the first time the young sultan came into the garden, he sent for and asked him where he had planted the trees from the new world, and made him tell him something about their nature. He was much gratified with the sugar maple.

As a small return for your kindness, I will send you also some graftings from Turkey, and have already bespoken some pear and apple graftings from Gamash Khaneh, (beyond Trabizoud;) some cherry graftings from Ceresunt, near Trabizoud; and will try also to get some apple graftings from Angora. These are all famous fruits here, (except the cherries,) and may be of interest to you. The tulip tree, the magnolia, quince, and the beech-tree are here,—the latter wild, and the two former in the sultan's garden. They are, however, rare, (the former,) and yours were not the less prized. Trees and flowers from Florence and Milan cost much less

than those in your catalogue, say one half; but their freight is dearer. The Turks are very fond of flowers, and have very pretty gardens near their country houses on the Bosphorus, in a small way. The gardeners are all Greeks or Christians, and have little taste or scientific acquirement. Now and then a French gardener brings flowers here for sale, but they all, or nearly so, are defective or dead. The Turks have a grand idea of our American forests, our flowers, and our birds. By the by, if you have the leisure, I will be much obliged to you if you can put me in the way of procuring two American red birds and two mocking birds. I would not mind paying handsomely for them. Please let me hear from you about this if convenient. With many thanks for your kindness, and always desirous of serving you, I remain very truly yours.—*J. P. B., Constantinople, April 20, 1848.*

ART. III. *Domestic Notices.*

Great National Convention of Fruit Growers.—In our last, we copied the programme of the fair of the American Institute, in which it was stated that a convention of fruit growers would be held in New York. In furtherance of this object, the committee of arrangements have issued the following circular:—

It is proposed to hold a Central Convention of Fruit Growers and Pomologists in the city of New York, during the great fair of the American Institute.

The institute having kindly offered to aid in carrying out said views, the convention will hold its sessions at Judson's Hotel, No. 61 Broadway, New York, commencing Tuesday, the 10th of October, at 10 o'clock, A. M.

Among the objects to be proposed at this convention, are the following :

To compare fruits from various sources and localities, with a view of arriving at correct conclusions as to their merits, and to settle doubtful points respecting them.

To assist in determining the synonymes, by which the same fruit is known in different parts of the country.

To compare opinions respecting the value of the numerous varieties already in cultivation, and to endeavor to abridge, by general consent, the long catalogue of indifferent or worthless sorts at the present time propagated by nurserymen and fruit growers.

To elicit and disseminate pomological information, and to maintain a cordial spirit of intercourse among horticulturists.

In order to increase as much as possible the interest of the convention, the delegates are requested to bring with them (carefully packed and labelled so as to present them in good order,) specimens of all fruits grown in their vicinity that may be worthy of notice, together with a small branch and leaves of each variety if possible.

In localities where any well known old varieties flourish particularly

well, specimens are desired, accompanied with memoranda respecting the soil upon which they grew and their culture.

Every contributor is respectfully requested to make a list of his specimens and present the same with his fruits, in order that a report of all the varieties entered, may be submitted to the convention as soon as possible after its organization.

The undersigned, in behalf of the societies they represent, respectfully solicit delegations from all horticultural and agricultural societies of our country, and of such number of persons as each society may deem expedient to send.

Societies will please transmit, at an early day, a list of the delegates they have appointed, to the corresponding secretary of the American Institute, T. B. Wakeman, Esq., New York.—(*Circular of Committee of Arrangements.*)

New Seedling Strawberries.—[Mr. J. Richardson, of Cambridgeport, whose advertisement appears in our present number, has raised several seedling strawberries, three of which he deems of sufficient merit to name. We examined the beds when in full bearing, and consider one of them a very desirable variety; this is the one called Richardson's Late; not so appropriate a name as might have been selected, as it is not later than our seedling; but, under his cultivation, it is a great bearer, and of very good size. Mr. Richardson does not know whether his plants are pistillate or staminate; but, from a careful inspection of some of the old flower stems, we believe it staminate, and this we think constitutes its real merit.

W. R. Prince & Co., of Flushing, have also produced a number of seedling strawberries, as will probably have been noticed by the advertisement in our last number; and some of them are said to be very desirable kinds. The names of the most prominent are Primate, Primordian, and Profuse Scarlet. For these and other seedlings, Mr. Prince received prizes at the June exhibition of the Long Island Horticultural Society.—*Ed.*]

Ott's Seedling Pear.—This is the name of a new summer pear, recently exhibited before the Massachusetts Horticultural Society, and received from Philadelphia, in the neighborhood of which city, we believe, it was raised. It is of medium size, somewhat resembling Dearborn's Seedling in form. The flesh is melting and juicy, and the flavor sprightly, rich, perfumed, and excellent. It is a decided acquisition to our summer pears.

Mexican Squash.—Dr. Lewis W. Minor, of U. S. N., brought, last year, from Vera Cruz, a few seeds of the mammoth squash, peculiar, we believe, to that latitude. They were given to the Hon. J. W. Leseane, who carefully planted and cultivated them in his garden. The vines are of large growth, and occupy as much space as those of the pumpkin, and are now loaded with fruit. We have been presented with one, the circumference of which measures, one way, two feet five inches, and, the other, two feet two and a half inches. It is as soft and tender as the most delicate of the squash family. The flesh is whitish yellow, of fine flavor, and far superior, in all respects, to the best squashes common with us.—*Mobile Herald.*

Blight in Pear Trees.—[We regret to learn that some of our cultivators around Salem have been troubled with the *blight* upon their pear trees. Not to a great extent, but both Mr. Ives and Mr. Cabot have lost some quite large and valuable trees; in most instances, they were healthy and vigorous until a day or two before the attack. Last winter was unusually open and changeable, the temperature sometimes high and again many degrees below zero; and we attributed the cause to a continued action of the sap in large trees, below the reach of the frost, while the branches are exposed to a very low temperature. Mr. Beecher and other western writers, have called it *frozen sapblight*, and Mr. Downing has adopted their opinion. It is, we doubt not, caused by severe cold weather, but whether in the way these writers speak of, remains to be discovered. Now that it has appeared among us, we trust its cause will be fully ascertained.—*Ed.*]

The Fruit Crop in Ohio.—The crop of grapes here this year is large, and will, it is believed, produce more wine than has been produced in any former year. Peaches are plenty and of excellent quality, especially the late sorts in the neighborhood of Cincinnati, but the country to the north of this is without any this year. Apples are, as usual, fine; they are, in fact, the standard fruit of Ohio, and are nowhere produced in greater perfection. Plums and nectarines never bear unless in those cases where care is taken to keep off the curculio. Pears are scarce here. They would do well enough, I think, if properly planted; as it is, they are frequently winter-killen when young. Hothouse grapes have been produced here in pretty good condition in the garden of Mr. Longworth, and also in that of Mr. Shoenberger,—under glass, of course, in both cases.—*I remain, sir, your sincere friend, M. Kelly, Cincinnati, August 31, 1848.*

ART. IV. Massachusetts Horticultural Society.

Saturday, August 5th, 1848.—An adjourned meeting of the Society was held to-day,—the President in the chair.

A copy of the *Transactions* of the New York Agricultural Society, Albany, was received through B. W. Johnson, Secretary, and a vote of thanks tendered for the same.

John Schouler, West Cambridge, was elected a member.

Adjourned for two weeks to August 19th.

Exhibited.—**FLOWERS:** From the President of the Society, six plants of new and handsome gladiolus, cut flowers, &c. From John Cadness, Cæstrum Aurantiacum, and cut flowers of new gladiolus, bouquets, &c. From Messrs. Winships, a fine specimen of *Erythrina Crista galli*; also, bouquets, &c. From G. Gilbert, Plymouth, beautiful specimens of *Sabbatia chloroides*, C. var. *alba*, *O'rchis fimbriata*, &c. From Hovey & Co., specimens of *Trachymene Cærulea*, and phloxes, Standard of Perfection, Princesse Marianne, Speculum, Göethe, &c. &c. Bouquets, cut flowers, &c. from A. Bowditch, O. Johnson, J. Breck & Co., F. Putnam, W. Ken-

rick, J. A. Kenrick, L. Davenport, J. Cruickshank, J. Nugent, Miss Russell, and others.

AWARD OF PREMIUMS.

BOUQUETS.—To J. Cadness, for the best pair of mantel bouquets, \$2.

To Messrs. Winship, for the second best, \$1.

To J. Nugent, for the best pyramidal bouquet, \$2.

To J. Sheehan, for the second best, \$1.

GRATUITIES.—To Miss Russell, for a basket of flowers, \$1.

To Mrs. Kenrick, for a basket of flowers, \$1.

FRUIT.—From O. Johnson, fine red Astrachan apples, Black St. Michael figs, Citron des Carmes pears, and very handsome Zinfindal and Black Hamburg grapes. From J. Owen, Early Harvest apples. From J. Eustis, Early Harvest apples. From F. Dana, Garretson's Early apple, a new and desirable kind. From E. Brown, Early Harvest apples. From A. W. Withington, Red Astrachan, Early Harvest, Benoni, and other apples. From A. D. Williams, Williams, Early Bough, Red Astrachan, Early Harvest, Dutch Codlin, and other apples; Red Dutch currants; Sugartop, Jargonelle, and other pears, and Yellow Gage plums. From C. Newhall, Zinfindal and Black Hamburg grapes. From B. V. French, blackberries, very handsome.

From Messrs. Hovey & Co., Wilmot's Black Hamburg, Black Hamburg, White Frontignan, Muscat Blanc Hatif, and other grapes; also fine Doyenné d'Ete pears. From A. Bowditch, Black Hamburg and Lombardy (!) grapes. From S. Walker, fine Jargonelle and Belle de Bruxelles pears. From G. Merriam, very fine blackberries. From J. F. Allen, peaches, Franconia raspberries, Hunt's Tawney nectarines, and Wilmot's Black Hamburg, Ferral, White Nice, and other grapes. From J. Lovett, very fine blackberries, and Citron des Carmes pears. From J. S. Cabot, Citron des Carmes and Doyenné d'Ete pears. From H. Vandine, apricots, and Citron des Carmes pears. From W. C. Strong, peach, and Royal Hative plums, both fine.

August 12th.—Exhibited.—**FLOWERS:** From the President of the Society, a variety of cut flowers, dahlias, &c. From J. Cadness, a fine variety of gladiolus, bouquets, &c. Bouquets, cut flowers, balsams, &c. from T. Needham, J. Nugent, P. Barnes, L. Davenport, Jos Breck & Co., A. Bowditch, John Parker, Miss Russell, and others.

AWARD OF PREMIUMS.

BALSAMS.—To T. Needham, for the best display, \$3.

No second premium awarded.

BOUQUETS.—To John Cadness, for the best pair of mantel bouquets, \$2.

To Jas. Nugent, for the best pyramidal bouquet, \$2.

To Miss Russell, for the second best, \$1.

GRATUITIES.—To J. Cadness, for a fine display of gladiolus, \$3.

To Miss Mary Kenrick, for a basket of flowers, \$1.

FRUIT: From the President of the Society, French Jargonelle, Belle d'Aout, Bloodgood, and Beurré d'Allemagne pears. From O. Johnson, beautiful specimens of Red Astrachan and Early Bough apples; also Jar-

gonelle and Jargonelle of the French pears. From J. Washburn, specimens of a handsome seedling sweet apple, called the Horseblock, very fine; also Bloodgood pears. From J. Owen, Jargonelle, Jargonelle of the French, and Crawford pears; plums without name. From the Lunatic Asylum, peach plums. From J. F. Allen, a new grape called the Poiteau Noir, much resembling, if not the same as the Black Raisin, berries very large, and of coarse appearance. From Jos. Lovett, fine blackberries. From E. M. Richards, Christiana melons. From J. Nugent, three varieties of grapes. From A. Bowditch, two varieties of grapes. From J. Sleeper, apricot plums. From G. Merriam, Jargonelle of the French pears.

From Messrs. Hovey & Co., peaches cultivated in *fifteen inch pots*, very fine, some of them measuring nine inches in circumference; also Muscat Blanc Hative, Muscat de la mi Aout, (new,) Chaptal, (new,) Wilmot's Black Hamburg, Chasselas Musqué, Red Chasselas, Black Hamburg, Chasselas of Fontainebleau, and other grapes; Brunswick, White Marseilles, Black Ischia, and Brown Turkey figs. From A. D. Williams & Son, Jargonelle pears, and five other sorts without name, Williams, and other apples, plums, currants, &c. From S. Walker, Belle de Bruxelles, and Jargonelle pears. From G. Merriam, French Jargonelle pears. From J. L. L. F. Warren, Early Harvest and River apples. From E. Brown, Early Harvest apples, and Jargonelle pears. From C. Newhall, Curtis's Striped and Summer Rose apples. From Messrs. Hyde, Williams, and Orange Sweeting apples. From H. Vandine, a variety of plums and French Jargonelle pears. From F. W. Macondry, Julienne, Jargonelle, and pears received from France for the Marie Louise; also Black Hamburg grapes, and Coolidge's Favorite peaches. From J. Breck & Co., Belle d'Aout pears.

VEGETABLES.—From O. N. Lane, Broad Windsor beans.

August 19th.—An adjourned meeting of the Society was held to-day,—the President in the chair.

A letter was received from D. Brinkle, of Philadelphia, accompanied with specimens of new pears. Vote of thanks for the same.

On motion of Mr. Walker, it was voted to invite the following societies to send delegations to the Annual Exhibition of the Society, September 20th, 21st, and 22d :—

Cincinnati Horticultural Society.

Essex County Institute.

Pennsylvania Horticultural Society.

New York State Agricultural Society.

Albany and Rensselaer Horticultural Society.

New Haven County Horticultural Society.

American Institute, New York.

Worcester County Horticultural Society.

New Bedford Horticultural Society.

Said delegation to consist of the President and two other members.

Adjourned two weeks to Sept. 2.

Exhibited.—**FLOWERS:** From the President of the Society, a variety of fine phloxes, dahlias, &c.. From Jos. Breck & Co., a variety of fine phloxes, dahlias, and other flowers, From Hovey & Co., sixteen varieties of phloxes, among which were Standard of Perfection, Göethe, Speculum, Princesse Marianne, Blanc de Neuilly, Speciosa, Nymphaea alba, Charles, &c. &c. From John Cadness, pot plants, cut flowers, and bouquets. Bouquets, phloxes, &c., from J. Nugent, W. Kenrick, T. Needham, and others.

AWARD OF PREMIUMS.

PHLOXES.—To J. Breck & Co., for the best ten varieties, \$6.

To Messrs. Hovey & Co., for the second best, \$4.

To J. Nugent, for the third best, \$3.

BOUQUETS.—To J. Cadness, for the best pair of *mantel* bouquets, \$2.

To J. Nugent, for the second best, \$1.

To J. Nugent, for the best *pyramidal* bouquet, \$2.

GRATUITIES.—To Miss Russell, for a basket of flowers, \$1.

FRUITS.—From the President of the Society, Passans du Portugal and Summer Franc Real pears. From B. V. French, Garden Royal, River, and Early Strawberry apples. From C. Downing, Newburgh, N. Y., Summer Rose, Dodge's Early Red, and sour Bough apples. From Dr. Wm. C. Brinkle, Corresponding Member, Ott's Seeding pear, a native variety, which the Committee pronounce "of superior quality;" also, Steinmetzer's Catharine, and Copea pears. From S. Walker, Chelsea, peach plums. From A. Bowditch, Black Hamburg grapes. From B. D. Emerson, White Chasselas grapes. From T. Needham, eight varieties of grapes.

From Messrs. Hovey & Co., eleven varieties of grapes; also two or three dozen splendid peaches, raised in pots. From O. Johnson, Early Bough, Red Astrachan, Summer Pearmain, and Yellow Crab apples; also Bloodgood, Dearborn's Seedling, Rostiezer, Jargonelle, and August Muscat pears; Fotheringham plums, fine Early Newington nectarines, and Black St. Michael figs. From S. Walker, Tyson, Passans du Portugal, Summer Franc Real, Hampden's Bergamot, and one variety of pears without a name. From E. Bemis, fine Royal de Tours plums. From J. Breck & Co., Belle de Bruxelles pears, and Royal de Tours plums. From E. Wight, Julianne pears. From F. W. Macondry, Jargonelle and other pears. From J. Burnett, Pumwater apples, fine. From C. H. Pendleton, near Stonington, Conn., Summer Greening apples. From R. Crooker, Royal Hative plums. From J. Washburn, Horseblock apples, fine. From A. D. Weld, fine Williams apples. From A. Nickerson, Jargonelle pears, extra. From J. L. L. F. Warren, Brunswick and Brown Turkey figs. From A. D. Williams & Son, plums, fine Williams apples, and Jargonelle and Dearborn's Seedling pears. From E. Brown, Jargonelle and Dearborn's Seedling pears. From W. C. Strong, Elruge nectarines, and Blue Perdrigon (?) plums.

VEGETABLES.—From Geo. C. Crowninshield, Egg plants and tomatoes.

August 26th.—*Exhibited.*—**FLOWERS:** From the President of the Soci-

ety, Japan lilies cultivated in the open ground, having only a slight protection last winter; also dahlias, phloxes, &c. Bouquets, cut flowers, &c. were exhibited from Jos. Breck & Co., Jas. Nugent, John Cadness, John A. Kenrick, P. Barnes, John Quant, L. Davenport, John Parker, Isaac Spear, W. Kenrick, and others.

AWARD OF PREMIUMS.

BOUQUETS.—To John Cadness, for the best pair of *mantel* bouquets, \$2.

To James Nugent, for the second best, \$1.

To James Nugent, for the best *pyramidal* bouquet, \$2.

To Miss Russell, for the second best, \$1.

GRATUITIES.—To P. Barnes, for six pot plants, \$1.

To Miss Kenrick, for a basket of flowers, \$1.

PLANTS IN POTS.—To John Quant, for the best six plants in pots, \$2.

FRUIT.—From the President of the Society, Garden Royal apples, handsome; *Beurré d'Amanlis panaché*, *Belle d'Aout*, *Bloodgood*, and *Dearborn's Seedling* pears, and one received from France, as *Marie Louise*. From Samuel Hill, *Black Imperial* (?) plums, fine. From Messrs. Breck & Co., *Belle d'Aout* pears. From Winship & Co., *Summer Franc Real*, *Winship's Seedling*, and other pears. From F. W. Macondry, *Beurré d'Amanlis panaché*, *Summer Rose*, and *Arch due Charles* (?) pears; *Black Hamburg* grapes. From S. R. Johnson, *Washington* plums, very fine. From G. Walsh, *Green Gage* plums. From Warren's garden, *Dearborn's Seedling* pears. From J. Nugent, *Black Hamburg* and *Sweetwater* grapes, and *Williams's Bon Chrétien* pears. From W. C. Strong, fine nectarines. From Isaac Fay, *Yellow Gage* plums. From S. Walker, *Crab* apples, a new variety; *Hampden Bergamot*, *Rostiezer*, *Summer Franc Real*, *Passans du Portugal*, *Summer Rose*, *Valleé Franche*, *Flemish Beauty*, and *Williams's Early* pears; *Washington* plums, fine. From George Bartlett, apples for a name, unknown. From J. Washburn, *Monamet* apples, heretofore called *Horseblock*, a very fine sweet apple. From Otis Johnson, *Summer Pearmain* apples; *Belle et Bonne*, *Bloodgood*, *Dearborn's Seedling*, *Summer Franc Real*, and *Rostiezer* pears; also, *Black Fig* of St. Michaels.

From Hovey & Co., *White Ischia*, *White Marseilles*, (extra fine,) *Brunswick*, and *Brown Turkey* figs; *Wilmot's Black Hamburg*, *Black Hamburg*, *Grizzly Frontignan*, *White Frontignan*, *Muscat Blanc Hatif*, *Red Chasselas*, *Moranet*, (new,) *Chaptal*, and other sorts of grapes. From N. Stetson, *Brunswick* figs; *Red Chasselas*, *Pitmaston White Cluster*, *White Muscadine*, *Malvasia*, (?) and *Macready's Early White* grapes. From T. Needham, *Black Frankendale*, (?) *Muscat of Alexandria*, *Black Hamburg*, *Grizzly Frontignan*, *White Frontignan*, *Golden Chasselas*, *Black Lombardy*, *Chasselas of Fontainbleau*, *Chasselas Musque*, and *de la Palestine* (?) grapes, and one sort unnamed. From G. C. Crowninshield, by J. Quant, melon. From H. Vandine, *Early Yellow Gage*, *Washington*, *Italian Damask*, *Pond's Seedling*, *Wilmot's Early Orleans*, *Black Imperial*, (?) *Prince's large Yellow Gage*, and *Green Gage* plums. From J. S. Sleeper, *Smith's Orleans* (?) and *Yellow Gage* plums; *Summer Rose* pears. From S.

Downer, Jr., Gros Roi Louis pears, scarcely worthy cultivation. From E. Bemis, Dearborn's Seedling and Green Chisel pears.

From J. F. Allen, Downton, Hardwicke, Roman, fine, Hunt's Early Tawney, and Temple's, very fine, nectarines; Yellow Rareripec, New Jersey Grosse Mignonne, Coolidge's Favorite, fine, old Royal George, fine, Grosse Mignonne (true), fine, Hoffman's Favorite, fine, Violet Hatif, and Tippecanoe peaches; Green Gage plums: Tyson, Passans du Portugal, Summer Franc Real, and Hanners pears, Portieau Noir, Whortly Hall Seedling, Ferral, White Nice, and Golden Chasselas grapes. From Robert Watt, apple for a name: Beauty of Kent(!). From Azel Bowditch, Black Hamburg grapes. From J. Owen, Green Gage, Imperial Gage, Jefferson, Bingham, Lawrence's Favorite, Columbia, Washington, and Damsons plums, and one for a name; apples for a name; pears, do. From Ellwanger & Barry, Rochester N. Y., pear, sent as Belle de Bruxelles, and proves to be the same as Belle d'Aout; it has been cultivated here for several years, and is considered quite unworthy of cultivation, except for its size and beauty. From the Pomological Garden, Rostiezer, Elizabeth, and unknown pears, from Van Mons. From N. P. Smith, Groton, Foundling apples, a good variety, ripening for two months in succession. From A. D. Williams & Son, Williams, Porter, Fall Sopsavine, Pumpkin Sweet, and Alexander apples; Orange, Vienna, Rousselet de Rheims, Harvard, Beurré d'Amanlis, and Williams's Early pears—three unnamed.

VEGETABLES: From F. W. Macondry, Lima beans. From J. Quant, Lima beans.

ART. V. Obituary.

DEATH OF WILLIAM OAKES, Esq.—We are pained in announcing the death of our late correspondent, Mr. Oakes, of Ipswich, Mass., which took place by drowning, on Monday, the thirty-first of July last, at the age of 48 years. Mr. Oakes was well known as one of the most accomplished botanists of the day; and, although he had never published any detailed work of his own, his contributions to the volumes of other botanists were extensive and of great value. To our readers his name is familiar as the author of the following papers:—

1. Notice of some rare plants of New England, with descriptions of some new species, Vol. VII., p. 178.
2. On gathering asparagus, Vol. VII., p. 198.
3. On the advance of spring in the eastern part of Massachusetts, Vol. VII., p. 202.
4. Review of Torrey & Gray's Flora, Vol. VII., p. 264.
5. Notice of some of the mosses of New England, Vol. XIII., p. 171.
6. Notice of some of the plants of New England, Vol. XIII., p. 217.

Mr. Oakes's *herbarium*, which is very extensive, has been prepared with the greatest care; and the beauty of some of the specimens has been preserved in a most remarkable degree. Ardent in the pursuit of his favorite

study, he spared no pains in the preparation and preservation of species, many of which are of his own discovery.

The White Mountains was the favorite summer resort of Mr. Oakes, the botany of which and the surrounding country he long since fully explored. Recently, he had been engaged in publishing a series of Illustrations of the Grand Scenery of this region, the descriptions being from his own pen, and the sketches by Mr. Sprague, a young artist of Hingham. Only one number, we believe, was published, containing four plates; but the whole work was to consist of ten or more numbers.

Mr. Oakes, we have said, was an ardent lover of botanical science; his attainments in other branches of Natural History were of the highest order; he was also a zealous cultivator, and, in his garden, introduced successfully many of our native plants. Amiable, courteous, and affable in manner, benevolent and upright in heart, he possessed a large circle of friends, who sympathize with his bereaved family, and deeply lament his loss.

HORTICULTURAL MEMORANDA

FOR SEPTEMBER.

FRUIT DEPARTMENT.

Grape Vines in the cold house will now be coloring and swelling off rapidly, and, by the last of the month, will be nearly or quite ripe, especially the earlier sorts. Abundance of air should now be admitted when the weather is good, guarding, however, against cold currents, which often cause mildew. Prune out the laterals, and, where crowded much, they may be cut quite back, unless it exposes the berries too much to the sun. Vines in the grapery, when the fruit has been cut, should be aired as much as possible, and, to ripen off the wood, the sashes may be left open day and night. Nothing is more important, in successful grape-growing, than *fully* mature wood.

Strawberry beds may be made all this month with the best success. Let the soil be well enriched and dug deep, and the plants will take fine hold before winter. Old beds should be kept clear of weeds, and extra runners not wanted to fill up vacant places.

Cherry and plum trees budded last month will need some attention. See that the matting is not girdling the young stocks; and where too tight they should be loosened and retied again with fresh bays.

Currant and gooseberry bushes may be safely transplanted the latter part of the month.

Peach trees should be budded this month.

Autumn grafting may be done this month; if short branches with fruit buds are inserted, fruit may be obtained next year.

Autumn transplanting may be now commenced; if the leaves are *all cut off*, the trees will remove safely and get well rooted before winter.

FLOWER DEPARTMENT.

Pelargoniums should now be repotted. The plants should be well shaken out of the old earth, and placed again in the same sized pots, in a good compost; after potting, place them in a warm, half-shady place, or, if at hand, an old frame, where they may remain a fortnight, till well rooted; they may be then exposed to the full sun to ripen the wood. Cuttings put in last month should now be potted off.

Neapolitan violets should now be planted out in frames where they are intended to remain during the winter. If properly protected, they will bloom from December till May. Plants intended for the greenhouse should now be potted off.

Dahlias will now be coming into bloom, and should be carefully tied up and properly pruned; if the situation is dry, mulching will greatly promote the growth of the plants.

White lilies may be taken up, parted, and reset, this month.

Carnations and *Picotees*, of choice kinds, should be taken up and potted. preparatory to wintering them in frames.

Oxalis, *rosea* and other winter flowering sorts may be potted this month.

Leschenaultia formosa should be repotted now.

Iris and *Sparaxis* for winter flowering may now be potted.

Hyacinths and *Tulips* may be planted this month.

Seedling Cinerarias, *Calceolarias*, &c., should now be shifted into second sized pots.

Azaleas should now be got ready to remove to the house the latter part of the month. Where there are many, it is best to place them in frames, as the late fall rains injure them.

Perennial plants of all kinds may be safely transplanted this month.

Chrysanthemums layered last month should be taken up and repotted the last of the month.

Callas should be potted this month.

Roses should be potted this month, placing them in frames until removed to the greenhouse.

Peonies may be safely removed this month.

Chinese primroses may now be shifted into six-inch pots.

Japan lilies may now have the tops of all those which have turned yellow cut off, and the pots placed away under the stage till the season of repotting.

Achimenes and *Gloxinias*, done blooming, may be placed away under the stage till February.

Gesnera zebrina should now be shifted into larger pots.

Camellias may yet be shifted, if not already done; the plants should all be got ready now for removal to the greenhouse.

Heaths, *Epacris*, and similar plants which require it, should now be carefully repotted.

Abutilons may now be taken up and potted.

Greenhouse plants of all kinds should now be prepared for their winter quarters, repotting, pruning, and top-dressing, all which require it.

THE MAGAZINE OF HORTICULTURE.

NOVEMBER, 1848.

ORIGINAL COMMUNICATIONS.

ART. I. *Notes of a Visit to several Gardens and Nurseries in Western New York.* By the EDITOR.

A RECENT visit to the Great State Fair, of the N. Y. Agricultural Society, held at Buffalo, in September last, a brief account of which we have already given at p. 453, afforded us an opportunity to visit the gardens and nurseries of several of our friends and correspondents in Western New York. We have long had a desire to see something of this portion of the Empire State, so noted for its fertile soil, and its favorable climate, and considered by many as the finest fruit-growing region—more especially of apples—in the Union. It is scarcely necessary for us to state, that, although we set out with rather high expectations, in but few instances were we disappointed. The season had been fine, the crop abundant, and the specimens of fruit generally remarkably fine and handsome.

Orchard cultivation is not only well understood in Western New York, but it is practically carried out; it is true, the orchards are young, compared with those of Connecticut or Massachusetts, and, on this account, perhaps, a comparison should not be made.

The trees are comparatively young, vigorous, and healthy, and in fine condition. But, making all due allowance for this difference in age, we are inclined to believe, that orchards in New York are managed with a greater degree of skill than those in Massachusetts. Certainly, most of the orchards we saw were in a much higher state of culture; the soil kept in good condition by applications of manure, but more particularly with the plough, and the aid of green crops; the trees

too are well pruned, and kept open to the sun and air, thus aiding in the perfection of all the fruit. We are well satisfied, that thorough cultivation has more to do in the production of superior fruit, than the too generally imagined cause of locality and climate; and that the frequent complaint, which we hear, that a particular fruit is adapted to the climate of New York, and will not succeed in Massachusetts, is more to be attributed to a want of judicious cultivation, than any peculiarity of soil or season.

We only regret that our limited time did not allow us an opportunity to extend our observations; but we hope another time to do this, and to add something more to these brief notes by the way, now given with a view to show the rapid advancement of horticulture, in a region so comparatively new as Western New York.

Buffalo, Sept. 5th.—Few cities in the country have so rapidly grown up as Buffalo. Twenty years ago, with only a few hundred inhabitants, it now contains more than forty thousand; at the head of lake navigation, now become of such great magnitude, it must eventually, with the increasing intercourse with the great West, become one of the most populous cities in New York. Covering a nearly level surface on the borders of Lake Erie, and having a deep and fertile soil, the environs of the city afford admirable situations for cottage and villa residences, and neat gardens; and we were gratified to see such good evidence of an increasing taste for horticultural pursuits, as was exhibited in the well laid out and clearly kept gardens, which already abound on some of the main avenues of the city. Our time was so occupied at the Fair, and our friends so much engaged in its arrangements, that we did not have the opportunity to visit any of the flourishing nurseries which are located here. Col. Hodge, of the Buffalo nursery, has a large and extensive collection of fruits, and has made great exertions to introduce many of the newest varieties of pears. The Horticultural Society, with Prof. Coppock, a zealous and enthusiastic cultivator, at its head, is doing much towards maintaining and disseminating a taste for every department of gardening.

Rochester Sept. 10th.—Many influences have combined to foster and encourage a taste for horticulture, in Rochester,

and its vicinity; the *Genesee Farmer*, one of the first agricultural periodicals established in the state, was published in this city, by our correspondent, Mr. Goodsell, and, although it has successively passed into various hands, it is now one of the most popular journals, and, with our friend Mr. Barry at the head of the horticultural department, continues to be a most valuable auxiliary in spreading a correct taste for horticultural pursuits. Another cause of the deeper interest existing here has been the early establishment of a Horticultural Society, which, though since extinct, did much to cherish a love for the art; subsequently, another association was formed, which now holds its regular exhibitions, and is in a most flourishing condition. Centrally situated as Rochester is, her nurserymen do a thriving business with the east and west, as well as with their Canadian neighbors, and the demand, which has been rapidly increasing, has induced the proprietors of the several nurseries to make greater exertions to introduce the finest flowers and fruits. They now hold a prominent place with the most flourishing establishments in the state.

Rochester Commercial Nursery, Messrs. Bissell, Hooker, & Sloane.—The nursery of Messrs. Bissell & Co., is situated on the main street, about a mile east of the city, and contains about thirty acres of land, most favorably situated, being nearly a perfect level, with a deep and fertile soil. The apple tree is the staple stock of the nurseryman in the west, and Messrs. Bissell & Co. have given their attention mostly to this fruit; they have an immense quantity of young trees coming in, as also a great stock now ready for the market. Recently, they have given much attention to the pear, and have added most of the new and popular varieties to their collection. But the blight has made such ravages, that it is almost disheartening to cultivators to attempt the culture of the pear here. Mr. Bissell pointed out to us tree after tree, which had been affected by it the past year, and, in one instance, a whole row of trees upon the quince, *imported last March*, which were entirely cut off to the ground! How will those cultivators, who have been such implicit believers in the *frozen sap-blight* theory, as detailed by Mr. Beecher, in our Vol. X. p. 441, and subsequently adopted by Mr. Downing, as *his* theory, reconcile

this with their views? Will they pretend that frozen sap had any thing to do with these imported trees? We suspect not: on the contrary, we should suppose that this would be sufficient evidence to destroy all belief in any such theory; and that other causes must now be looked to, as producing this dreadful malady.

But, while the cause of the blight remains unknown, it will be gratifying to learn, that there is some probability that a remedy has been discovered for its attacks, or rather that its ravages may be checked as soon as first perceived. Mr. Bissell, desirous of doing something to check a disease, if so it may be called, which is likely to desolate the pear orchards in some localities, has tried various experiments upon his trees, the past season; and, among others, the application of a solution of copperas and saltpetre; and, so far, with the best effect; a tree which had one limb destroyed, was immediately cut off below the attack, and the wood and bark carefully washed with the solution; its ravages were stayed, and fresh wood had begun to take the place of the blackened and decaying bark; with only the few experiments which have been tried, it would be altogether premature to warrant decisive results; but, thus far, the experiment has worked well, and, at another time, when an opportunity may offer to test them further, we hope to have a detail of them from Mr. Bissell himself.

The collection of cherries here is large, and the trees fine specimens; upwards of forty varieties, we believe, were fruited in the nursery this year: the collection of peaches is also excellent. The past season has been favorable to the peach in this vicinity, and we found Mr. Bissell's trees covered with fruit. The collection of shrubs and forest trees is limited, but comprises the most prominent kinds.

Mr. Bissell had recently erected a span-roofed graperly, about sixty feet long, and had just planted out the vines; the interior arrangements were not yet done; but, when finished, it will be a fine house, and will produce a large quantity of fruit, if properly managed. It is one of the first graperies, we believe, erected in the city.

To Messrs. Bissell & Hooker, we are deeply indebted for many favors, especially in procuring us specimens of fruit,

grown in the neighborhood, and we take this opportunity to express our obligations to them.

Mount Hope Gardens and Nurseries, Messrs. Ellwanger Barry & Rowe.—The nurseries of Messrs. Ellwanger & Co. are situated about one mile to the south of the city, and comprise a large extent of ground, of about forty acres, gently sloping to the east, including a good variety of soil, and well adapted to nursery purposes. Considerable of the land has recently been added to the premises, and was now just being ploughed up and put in readiness for spring planting.

The stock of plants is probably one of the largest and best in western New York, consisting of camellias, azaleas, fuchsias, and other popular plants in their numerous varieties, filling two greenhouses of considerable extent. In the open ground, we found an excellent collection of verbenas, among which were some beautiful seedlings raised by Messrs. Ellwanger & Barry, but not yet named. A great quantity of dahlias were yet in bloom. The collection of phloxes includes most of the new and fine varieties which have been so prominent at the Exhibitions of the Massachusetts Horticultural Society.

The cultivation of the pear was zealously commenced by Messrs. Ellwanger & Barry, some few years ago, but a larger part of the trees have been killed by the blight, just as many of them were coming into bearing; it was really disheartening to look at some of the mutilated stumps, the mere remnants of large and beautiful trees, which had been suddenly attacked by the blight; but for this almost annual appearance of so destructive a disease, the collection here would be exceedingly rich in large and handsome specimen trees. As it is, the proprietors, nothing daunted, keep on planting trees, and adding the new varieties to their collection, trusting that judicious treatment may lessen its attacks, or that something may be discovered which shall speedily check its ravages. We will not venture here to give our own ideas of its cause; yet, at another time, when we have gathered some further facts, we shall endeavor to take up the subject, and, at least, suggest what we believe to be the true cause of the blight. We would, however, state, that it is entirely distinct from the insect blight so well known in New England.

The Early Tillotson peach, of which so much has been said in its praise, we here saw in considerable quantities; and although we know nothing personally of the excellence of the fruit, never having had an opportunity to taste it, we cannot omit some notice of it, on account of its susceptibility to the attacks of the mildew; indeed, on this account alone, unless the fruit possessed some very remarkable qualities, we should consider it scarcely worthy of cultivation; the leaves were literally white, and completely rolled up. Ripening as it does, at the same time as the Early York, it cannot be considered so valuable as the latter peach, which, with us, is entirely free from mildew.

Messrs. Ellwanger & Barry have a fine collection of cherries and well shaped specimen trees, of all the leading varieties; the cherry does well here. There is a large and fine quantity of quince stocks, and among them a variety of very upright or fastigiate growth, similar to a poplar; this, we were informed, was originally selected from among some imported stocks, and from its neat habit, has been considerably propagated; whether it possesses any properties which will make it superior as a stock, remains to be proved. The stock of ornamental trees and shrubs comprises a good selection of the most popular kinds.

The grounds are kept in excellent condition in every part.

(*To be continued.*)

ART. II. *Descriptions and Engravings of Select Varieties of Apples.* By the EDITOR.

XIX. BOUGH. Coxe's *View*, &c.

Large Yellow Bough, { Hort. Soc. Cat. 3d. Ed. 1849.
 { *Fruits and Fruit Trees of America.*

Early Bough, *Book of Fruits*, 1st Ed. 1838,

Early Sweet Bough, *American Orchardist*,

Autumn Bough, Hort. Soc. Cat. 3d. Ed. 1849.

Sweet Harvest, of some collections.

THE Bough apple, (*fig. 46.*) was first described by Coxe, in his excellent Treatise, published as long ago as 1818, and

we have been at a loss to account for the various additions which have been made to this name by subsequent pomological writers. There is no *Late Bough*, that this should be distinguished as the *Early Bough*; nor is there a *Red Bough*, that it should be known as the *Large Yellow*. And there is no more reason why it should be called the *Early Bough*, than that the *Red Astrachan* should be called the *Early Red Astrachan*. Mr. Manning called it the *Early Bough*; Mr. Kenrick, the *Early Sweet Bough*; and Mr. Downing, follow-

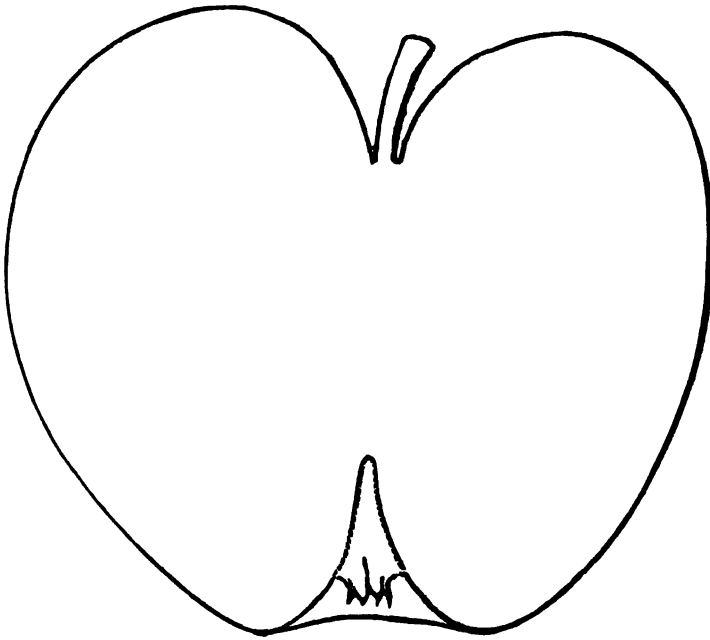


Fig. 46. *Bough Apple.*

ing Mr. Thompson, calls it the *Large Yellow Bough*. We do not admit the right of renaming our American fruits abroad, thus showing either a want of respect for American authorities, or an entire ignorance of the writings of our pomological authors: and, in this instance, as in many others, we hope that all pomologists will render justice by restoring the original name, especially when such name is brief and distinctive.

The Bough is one of our finest summer apples, having all the good qualities which should recommend a fruit for general cultivation. The tree is moderately vigorous, making a handsome head, and bears abundant crops of large, very fair fruit, which begins to ripen the last of July, and remains in eating till the first of September. As a table apple, it will not rank as high as the Early Harvest; but, as a kitchen fruit, in its honied sweetness and tender flesh, it has no equal of its season. It should be found in every good collection.

Size, large, about three and a half inches broad, and three deep: *Form*, roundish conical, broad, and slightly flattened at the base, narrowing to the crown, which is often quite small: *Skin*, fair, smooth, pale straw-color, faintly tinged with pale blush on the sunny side, and dotted with a few large russet specks: *Stem*, rather short, about half an inch in length, slender, curved, and inserted in a deep, regular, and rather open cavity: *Eye*, medium size, partially open, and considerably sunk in a round, regular basin; segments of the calyx short: *Flesh*, white, fine, slightly crisp and very tender: *Juice*, tolerably abundant, sugary, rich, and high-flavored: *Core*, large, nearly close: *Seeds*, small. Ripe in July and August.

XX. EARLY STRAWBERRY. *Fruits and Fruit Trees of America.*

American Red Juneating,
Red Juneating, (erroneously,) } *Fruits and Fruit Trees of America.*

Whether this apple, (*fig. 47,*) is a new and distinct American variety, originated in the vicinity of New York, as has been supposed, or is an old foreign fruit introduced from Europe, we have not yet been fully able to determine. It is raised in greater abundance than any other early apple, and the markets of New York and Boston are supplied with it, raised in the neighborhood of the former city. Its brilliant appearance, added to the rich perfume of its skin, render it a favorite apple.

The Early Strawberry is readily known from the Early Red Margaret, which is the Red Juneating of many American collections, from its much longer and more slender stem, and from its roundish or somewhat oblate form. It comes in

just after the Early Harvest, and is nearly or quite equal to that favorite variety. The tree is a very abundant bearer, and the fruit remarkably fair and handsome.

Size, small, about two and a half inches broad, and two deep : *Form*, roundish, regular, and narrowing little to the crown : *Skin*, fair, smooth, with a yellow ground, but nearly or quite covered with fine stripes and splashes of light and dark red, interspersed with a few whitish specks : *Stem*, long, about one

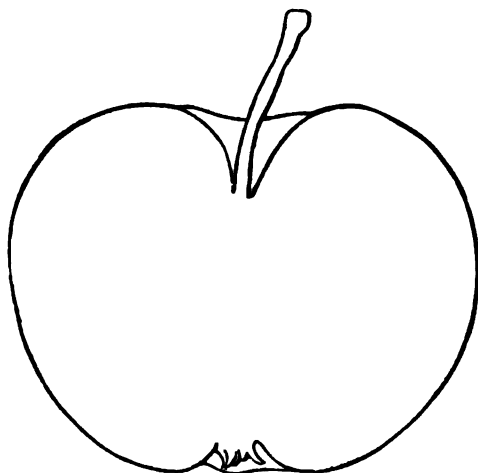


Fig. 47. Early Strawberry Apple.

and a quarter inches in length, somewhat slender, curved, and inserted in a rather contracted, deep cavity : *Eye*, medium size, closed, and but slightly depressed in a nearly smooth, shallow basin : *Flesh*, yellowish white, tinged with red next the skin, fine, crisp, and tender : *Juice*, abundant, pleasantly acid, sprightly, and high-flavored : *Core*, rather open : *Seeds*, medium size. Ripe in July and August.

XXI. SUMMER QUEEN. Coxe's View, &c.

Mr. Coxe, whose good judgment has rarely been called in question, describes the Summer Queen, (*fig. 48,*) as "an apple of the finest quality," and, in appearance, "uncommonly beautiful;" and subsequent writers have highly recommended it to cultivation. The Massachusetts Horticul-

tural Society have also designated it as "one of the best of its season." It is a large and handsome fruit, with the good quality of being used for the kitchen long before it is ripe. The tree is also of very luxuriant growth, with somewhat pendent boughs, and is a great and constant bearer. It comes in just after the Early Harvest and Bough, and fills a place when we have but few apples of its size, quality, and beauty.

Size, large, about three inches broad, and two and three quarters deep: *Form*, roundish conical, broad at the base, and tapering roundly to the crown, which is small: *Skin*,

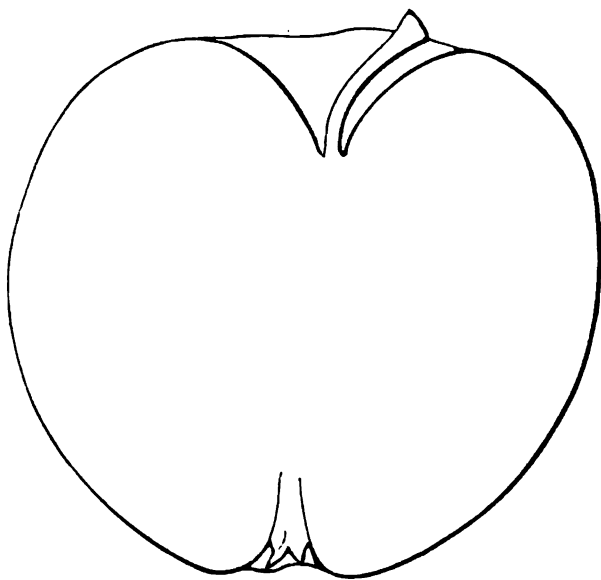


Fig. 48. Summer Queen Apple.

fair, smooth, with a rich yellow ground, very distinctly splashed and striped with purplish red, darkest on the sunny side, russeted at the base of the stem, and dotted with a few russet specks: *Stem*, medium length, about one inch long, stout, and obliquely inserted in a large, somewhat contracted, and deep cavity: *Eye*, large, open, and but slightly depressed in a very small, furrowed basin; segments of the calyx, short, evenly formed, and pointed: *Flesh*, white, tinged with pink,

fine, crisp, and tender: *Juice*, plentiful, pleasantly acid, brisk, and high-flavored: *Core*, large, open: *Seeds*, medium size. Ripe in August and September.

ART. III. *Some Account of an Experiment in the Removal of large Apple Trees, in the Autumn of 1846.* By P.

SOME time since, a friend and correspondent of ours was relating to us a very successful experiment in the transplantation of some remarkably large apple trees, in the fall of 1846, from which he gathered, the present year, a considerable quantity of fruit. Believing a detailed account of the method he pursued in the removal of such large trees would interest many of our readers, we prevailed upon him to send us a brief statement of the experiment, which is as follows:—

Mr. Hovey,—In reply to your question concerning the time, method, and success of the removal of the large apple trees to my orchard, I have not much to say. I only followed the most natural way; that is, so soon as the trees were in a condition of rest in the autumn, and immediately after the leaves had fallen, I aimed to secure as many as possible of the roots in an uninjured condition, and then speedily to set the trees in holes carefully prepared, of requisite size and depth. In order to secure good roots, we began by removing the soil around the base of each tree, until we found a root, and then followed that to its termination, carefully saving all the fibres, or endeavoring to do so. As the trees were quite large, (one now measures thirty-seven inches in circumference at the base,) the work was quite tedious; but, in a day and a half, the three were sufficiently cleared, to be lifted perpendicularly from their places, and then transported to their new homes, a distance of more than half a mile. The expense and care of transportation only, would have been increased, if the distance had been greater.

The trees were not pruned that fall, only as some limbs were removed for convenience of transportation. In the spring, (1847,) I pruned them carefully, removing as many of the blossoms, which came out in profusion, as I had patience and

time for. The expense attending the mere removal was very little, viz :—

3 men 3 days' work	-	-	-	-	-	\$4 50
Team 1 day	-	-	-	-	-	\$3 00
						<hr/>
						\$7 50

This, the second year, the trees have made fine growth, besides bearing a crop of very large and handsome apples ; a specimen of which I will perhaps send to you.

If these lines will induce any one to refrain from cutting down a valuable tree, which happens to stand in an inconvenient position, because it is larger than the trees usually procured at the nurseries, it will be worth while to have written them. There is no difficulty, in my view, in removing any tree, however large, with suitable care. The investment will be likely to *pay well* ; the first return from my trees, was of more than a bushel of handsome Greenings ; with the probability that the *profits* will greatly increase in coming years. It is a good thing to see our neighbors, with ourselves, planting young trees in situations where they are wanted in coming years, whether this generation may "eat the fruits thereof," or not. But my experience inclines me to say, whenever I see an old, thrifty tree likely to be destroyed for its room's sake, "Woodman, spare that tree."

P. S. I greatly prefer, you know, this season of the year, November, for setting out trees in any soil, which is not much thrown by the frost ; especially, as it saves much time in spring, when labor is abundant, and laborers scarce, and transfers a portion of the overplus of garden-work to a season when there is, comparatively speaking, nothing to be done.

Kingston, October, 1848.

ART. IV. *On the Culture of the Calceolaria.* By JAMES KENNEDY, Gardener to S. T. Jones, Esq., Staten Island.

It has been a matter of surprise to me, that, amidst the rage for improvement, manifested by all classes of society, and certainly not least among horticulturists, more interest is

not attached to the culture and improvement of that beautiful and singularly interesting family of plants, calceolarias; and, as I have had some experience in the management of these plants, I would throw out a few hints on their culture, which may be of use to at least some of your readers; not that I conceive myself able to instruct the experienced gardener or floriculturist; but I trust the observations made during my experience, which has been devoted to the study and improvement of that profession to which I belong, will be received with candor, and be found useful to the amateur and young gardener.

In the culture of calceolarias, I would call attention to the following heads;—1st, Propagation by Seeds,—2d, by Cuttings,—3d, Soil,—4th, Winter Management,—5th, Summer Management.

PROPAGATION BY SEEDS.

Seeds are easily obtained from any plant, by fertilization; and, as the seedlings partake most of the parent from which the seeds are gathered, it is necessary, when shrubby plants are wanted, to choose the best variety of that description, and impregnate some of the flowers with the pollen of different calceolarias, either herbaceous or shrubby; and, when herbaceous plants are more in request, to perform the operation on a good herbaceous variety. Mark the flowers which have been impregnated, by tying a small piece of silk thread immediately below the impregnated flowers, and using threads of various colors, matching, or otherwise indicating the colors of the flowers from whence the pollen was taken; the impregnated blossoms are thus easily labelled; when the seeds are ripe, the operator can tell with certainty from what varieties the pollen had been taken, which had rendered each pod prolific.

In the latter part of August, or early in September, I sow the seeds in large pans, well drained, and filled with very light sandy compost. Sow the seeds on the surface, press it gently down with a flat piece of wood, and water with a fine syringe or the fine rose of a watering pot; place the pans in a warm situation, being careful to shade when the sun shines, and water when the soil appears rather dry; they will soon be up, and while they are small is the best time to transplant them. Having ready a quantity of well-drained pots filled with

very fine light sandy compost, remove the seedlings into the potting-shed; take a broad-pointed knife, and cut the soil in the pots in a vertical manner; then raise up some of the young plants very carefully, breaking as few roots as possible, and place them against the little vertical bank, from an inch to an inch and a half asunder, pressing the soil to the roots, and proceed to do so, row by row, till the pot is full; then replace them in a slight heat, until they require to be transplanted again, which is generally in about three weeks or a month; they may be potted off singly, using light sandy soil, and thoroughly drained pots. As soon as they start into growth again, inure them gradually to the cold which will make them strong and robust, against the winter. I have found it a good plan to cover the surface of the soil with small pebbles, as it prevents the probability of their damping off during the dark days of winter.

I shall have occasion to return to these stock plants, when I treat of Winter and Summer Management, and shall therefore leave them for the present. Such is the result of my experience in raising seedling calceolarias, and I shall be happy to hear that they are considered worthy of a place in your very valuable Magazine.

Staten Island, N. Y., October 27th, 1848.

ART. V. *On the Cultivation of Achimenes.* By WM. SAUNDERS, Gardener to Wm. Bostwick, Esq., New Haven, Conn.

THIS interesting genus of plants is a native of Mexico, and the West Indies. They have become general favorites amongst the lovers of flowers, and deservedly so. They are easily propagated, not of difficult cultivation, and continue in flower for several months. As a summer decoration for the greenhouse, they are almost indispensable. Coming into flower when the pelargonium, calceolaria, and other early summer flowering plants are losing their beauty and attraction is another point greatly in their favor. Their flowers are of every tint and shade, amongst which, perhaps, the most widely different are longiflora, with its flowers "dark,

deep, beautifully blue;" *picta*, with its curiously veined leaves, and bright scarlet flowers; *paten*s, with its flowers of so intense a violet, (reddish purple,) that no artificial color can imitate them; and last, (*and least*, for it is very small,) *argyrostigma*, with its beautiful white flowers and silvery-looking leaves.

The soil best adapted for them is turfy loam, peat earth, and leaf mould, in about equal quantities; adding a little sand and charcoal finely broken. Mix these thoroughly, but use the compost as rough as possible. The best time to start the tubers for a general collection is about the end of February. If they are in the pots in which they flowered during the previous year, top-dress with leaf mould, or, if otherwise kept, plant the tubers rather thickly in shallow pots or pans, covering slightly with soil, and place them in gentle bottom heat, with an atmospheric temperature ranging from 60° to 75°; keep them moist, and they will soon vegetate. When they begin to show leaves, they must be shaded from bright sun, especially if the foliage is wet or damp, as they are easily scorched at this stage; when they have attained the height of two or three inches, they may be treated as follows:—

Grandiflora, *Skinneri*, *ledifolia*, and those of similar habit, should be planted three in a small pot, and stopped once or twice to make bushy plants; as soon as these are filled with roots, shift into larger pots, say eight inch, or the size called 24s, which will grow them quite large enough for any ordinary purpose. *Pedunculata*, *hirsuta*, and these tall-growing species, should be planted three or four round the sides of a 48 sized pot. Stop them closely at every joint two or three times, and, when shifted, they should be plunged as deep as possible in the pots, as they will root all up the stem, and it tends to keep them dwarf; deep, narrow pots are most suitable for these varieties; *pedunculata*, when well stopped, and liberally shifted, makes a very pretty specimen, sending out, about the middle of August, a profusion of its scarlet flowers.

Longiflora coccinea, *rosea*, *cupreata*, *pyropæa*, &c. may be planted at once into the flowering pots: the wider and shallower these are, the better. *Longiflora* should be planted about two inches apart, and topped as soon as they take fresh

root: these will make fine specimens, and be in flower in June. I have frequently seen, grown in this manner, specimens of the above three feet in diameter, in a nine-inch pot, and a whole mass of bloom. If they are not topped, they will flower sooner, but, of course, not make so large plants. *Coccinea* and *rosea* should be topped when about six inches high, and pegged close down; by this means, they will make fine bushy plants. *Coccinea* will not be in flower until the middle of August; *rosea*, six weeks sooner; *picta* succeeds best from cuttings put in about the end of August, and grown rapidly in a moist heat early in the following spring. It is a shy flowering sort at best, but the beauty of its leaves compensates for this.

They should be grown in a gentle hotbed, in about 75°, until fairly established, when they will succeed admirably in a close frame without any artificial heat: always shade from bright sun: water in the afternoon such as require it: slightly syringe the whole, and shut close with a good heat. They delight in a moist atmosphere, but the roots must not get saturated. When coming into flower, they may be removed into the greenhouse. Air carefully, avoiding cutting winds and cold draughts. If moisture be kept up by sprinkling the house occasionally, and shading attended to, the colors will come out truer, and the flowers stand longer. They are easily propagated by cuttings or leaves. Some of the varieties make small bulbs on the stem, which make as good plants as any. After they are done flowering, water sparingly, until most of the bulbs are matured, when they require no more care than keeping them dry, and free from frost. They are generally kept in the same pots that they have been grown in, but I have found them keep better, and take up less room by being shaken out and stored away in dry sand, putting in a layer of sand and tubers alternately, so as to exclude them from air. By this means, they are also more convenient for planting in spring.

New Haven, Conn., October, 1847.

The achimenes are among the most useful as well as beautiful plants which have lately been introduced, and are especial favorites of ours. Our conservatory is rendered gay with

their many-hued blossoms from June to October, and we cannot too highly recommend them for every purpose, whether for the conservatory, greenhouse, or parlor. Easily grown, freely propagated by offsets from the root, and in bloom six or eight months, what greater merits can any plants claim for the care of the amateur?

Mr. Saunders, in classing together those species and varieties which succeed best by particular treatment, has shown that he has carefully studied their habits, and the information will be gladly welcome to all who cultivate this tribe. We are only surprised to learn that *A. picta* does not flower freely under Mr. Bostwick's good management. With us, it forms a plant *two feet* high, clothed with quantities of flowers at the same time, and in bloom from June till October. It requires a very open soil.—*Ed.*

ART. VI. *Floricultural and Botanical Notices of New and Beautiful Plants figured in Foreign Periodicals; with Descriptions of those recently introduced to, or originated in, American Gardens.*

Abelia rupestris, a handsome half-hardy shrub, one of Mr. Fortune's introductions, from the Chamoo Hills, is now prettily in flower, and is a fine addition to all collections. It has a neat erect and bushy habit, and every shoot is terminated with a cluster of pink flowers. South of Philadelphia, it will undoubtedly prove hardy, and will be a fine garden shrub it may, in sheltered situations, stand in the latitude of Boston.

Salvia splendens major is the name of a fine variety of the old and admired *splendens*, which we lately saw in bloom, in the collection of Messrs. Hogg & Son, New York; it is much dwarfer in habit, branching close to the ground, more compact in growth, and the flowers are produced in more dense spikes, with lateral branches; it is so much preferable to the *splendens*, that it must eventually take the place of that old favorite.

Begonia fuchsoides, which we recently noticed, (XIII. p. 361,) we also saw in bloom at Messrs. Hogg & Son's; it is really a most exquisite species of this much neglected tribe; the flowers depend in the manner of the most drooping of the fuchsias, and being of a brilliant crimson, the beauty of a plant in full bloom, can be readily imagined by all lovers of flowers; it is an indispensable addition to every collection.

87. *SA'LZIA OPPOSITIFOLIA* Ruiz and Pavon. Opposite-leaved flowered Sage. (*Lamiaceæ*.) Peru.

A greenhouse plant; growing two feet high; with scarlet flowers; appearing in summer; increased by cuttings; grown in rich soil. *Flore des Serres*, 1848, pl. 345.

A new and brilliant species of the salvia, introduced from Peru, by Messrs. Veitch & Co., of Exeter. The leaves are roundish, the branches covered with pubescence, and the flowers, which are of the brightest scarlet, are produced in dense terminal clusters. It is a free bloomer, and, from its neat and dwarfish habit, will undoubtedly become a great favorite in every collection. (*Flore des Serres*, May.)

88. *STROBILANTHES LACTATUS* Hook. Striped-leaved Strobilanthes. (*Acanthaceæ*) East Indies?

A stove plant; growing two feet high; with pale blue flowers; appearing in spring; increased by cuttings; grown in leaf mould, loam, and sand. *Flore des Serres*, 1848, pl. 346.

A singular and interesting plant, with pale lilac or lavender-colored flowers, somewhat like a *Ruellia*, under which name it was introduced; the leaves are deep green upon the outer edge, and the centre distinctly marked with white. The variegated appearance of the foliage, and the neat blossoms, render it a plant worthy of introduction. (*Flore des Serres*, May.)

89. *OXYPTALUM SOLANOIDES* Hook. Solanum-flowered Oxypetalum. (*Asclepiadaceæ*.) Mexico.

A greenhouse plant; growing two feet high; with rose-colored flowers; appearing in spring; increased by cuttings; grown in heath soil and loam. *Flore des Serres*, 1848, pl. 347.

A very pretty plant, with rose-colored flowers, which appear in terminal spikes; blooming freely in a warm temperature, and forming a fine ornament of the greenhouse; it is easily increased by cuttings. (*Flore des Serres*, May.)

90. *BARBACE`NIA PURPU`REA* *Hook.* Purple-flowered Barbaenia. (*Hæmodoræceæ.*) Brazil.

A stove plant; growing a foot high; with violet purple flowers; appearing several times a year; increased by offsets and cuttings; grown in heath soil and sandy loam. *Flore des Serres*, 1848, pl. 248.

A very pretty plant, with deep violet purple flowers, which are produced several times a year; and, on this account, worthy of introduction into our collections. It is of easy cultivation. (*Flore des Serres*, May.)

91. *CAME`LLIA JAPO`NICA* VAR. *COUNTESS OF ORKNEY.* The Countess of Orkney's Camellia. Garden Hybrid.

So numerous are the varieties of camellias now, that it is impossible to figure only a few of the most choice and distinct sorts. The present variety is one of the latter description. The flower is large, with large outer petals, quite cupped, the centre ones smaller, and, in general form, resembling some of the finest tea roses. The color is a creamy transparent white, delicately tinted with rose, and relieved with stripes or spots of a deeper shade. "These different colors, upon a foliage particularly ample, and of a deep green, have a fine effect." The growth is vigorous and healthy, and the variety one of great merit. (*Flore des Serres*, May.)

92. *ARISTOLO`CHIA GRANDIFLO`RA* *Swartz.* Great-flowered Aristolochia. (*Aristolochidceæ.*) Jamaica.

A stove climber; growing ten feet high; with white and violet flowers: appearing in spring; increased by cuttings: grown in leaf mould, heath soil, and loam. *Flore des Serres*, 1848, pl. 351.

All the aristolochias have something to commend them to notice; all have singular flowers; and some are remarkable for their size; the present subject is one of these; the flowers measuring more than 26 centimetres, in diameter. It is one of the most showy species. (*Flore des Serres*, May.)

MISCELLANEOUS INTELLIGENCE.

ART. I. General Notices.

Cryptomèria japonica.—To persons who admire beautiful trees, (and who does not?) the following communications will be read with interest and pleasure. The *Cryptomeria japonica* is nearly allied to, and closely re-

sembles, in general appearance, the larger growing kinds, and more elegant species of the genus *Cupressus*. Our principal object, in drawing the attention of our readers to this tree, arises from a desire to set at rest, as far as the experience of gardeners permits, the question as to its being hardy, or not hardy enough to bear the severe frosts of our English climate.

Comparatively few of the trees of recent introduction, deserve a special notice of this kind, and, if we except *Araucaria imbricata*, and the *Cedrus Deodara*, the *Abies Douglassii*, and a few other trees, the *Cryptomeria* has at present no rival as a hardy evergreen tree, of equally rapid growth, and attaining the same magnitude.

The *Cryptomeria* grows, in the north of China, to 100 feet in height, with a particularly straight stem, throwing out numerous side branches, which form a dense tree, very handsome, and resembles the *Araucarias*, of Australia and Brazil. The wood is said to be very hard, and elastic, and withstands the most terrific winds or monsoons, which sometimes devastate that country. It is employed in the north of China, for the high poles which are every where placed at the front of the dwellings of mandarins, to denote their rank, where it often lasts for ages.

It grows well in any soil, but most rapidly in peaty or sandy ground. Two *Cryptomerias* were planted in the Horticultural Society's garden, at Chiswick, in a clay soil; these are now seven feet high, and have grown three feet during the present season. Others planted out in a peaty soil, are now nine feet six inches in height, and have grown four feet during the present summer: those, however, planted out in the clay soil, are the most handsome and robust plants.

The Japan Cedar, or *Cryptomeria*, was first described by Professor Thunberg, in 1784, under the name of *Cupressus japonica*, and in Japan it is known by the name "San" or "Sugi." Nothing was known of the living plants of this tree in England or in Europe, until introduced from China, by Mr. Fortune, seeds of which were received in May, 1844, and plants raised by the Horticultural Society, immediately afterwards. Mr. Fortune collected the seeds about Shanghai, in the north of China, where it is very plentiful, in the form of avenues and groves; it furnishes the principal shelter for birds, during extreme cold, when the thermometer sometimes falls as low as within five degrees of zero. It is also found growing plentifully on the three great Islands of Japan, and forms a tenth part of the forests which cover the skirts of the mountains betwixt the altitude of 500 and 1,200 feet.

A tree of this beauty, and rapid growth, and beyond all doubt, hardy, is therefore an immense acquisition, and will add greatly to the ornament of our pleasure-grounds; but what is most of all important in this particular, is its rapid growth, by which, if we calculate its annual progress at three feet, which is not much more than half what it frequently attains, we have a tree of thirty feet in height within ten years. We have taken some pains to procure information, and we think it will be admitted, that the hardness of this tree is fully, and beyond all question, established.

It will be seen, by a weekly advertisement, that Messrs. Standish & Noble, of Bagshot, possess the principal stock of this fine tree.

The following are a few extracts which we have taken from letters received, in reference to it, and chiefly with respect to its hardiness:—

The plant here, seven feet five inches in height, has stood out, without any protection, since the latter end of May, 1847, and appears to be perfectly hardy.—*W. M'Morran, gr. Blenheim, Sept. 26.*—There are six plants here, 4 feet 10 inches high; they were planted out in April last year, when about 1 foot high. The general character of the soil is a stiff red clay, without sand. The *Cryptomeria* seems a fast grower, and well adapted for the pleasure-ground.—*K. Mackay, Downton Hall, Ludlow.*—I have three plants, which were received from the Horticultural Society's Garden, in 1846, and which were planted out the following year, consequently, they have only experienced one winter. They appear, however, to be perfectly hardy, though I was sorry to perceive that they received a tinge of brown from the few frosts they experienced; this went off as the spring advanced.—*John Luscombe, King's Bridge, Devon.*—The *Cryptomeria* grows well here, and stands the wind better than most other plants.—*Andw. Toward, Osborne, Sept. 3.*—The plant of *Cryptomeria* here is 9 feet high; it was planted out in 1846, and has grown upwards of 3 feet this year. The circumference of the stem at the base, is 9 1-2 inches, and the plant measures fully 6 feet through.—*Scott, Bury Hill, Leatherhead.*—The *Cryptomeria* here is about four years old; it was planted out in 1846, when about 3 feet high, and is now 7 feet high, and 6 feet through. It is very ornamental, and has every appearance of growing to a great size.—*R. Duncan, gr. to J. Malcolm, Esq., Lamorby, Bexley, Kent.*—The *Cryptomeria* here was planted out in June, 1847, in a sheltered situation, and poor soil. It is now 11 feet 6 inches high.—*Chapman, gr. to the Earl of Ellesmere.*—Some plants of *Cryptomeria japonica*, were received from the Horticultural Society's garden, in 1846; one was planted out in Nov., of the same year, in a sheltered situation, on the lawn facing the north. It suffered a little after being planted out. In 1847, it grew to the height of 2 feet 7 inches, and, at the present time, it stands 5 feet 1 inch high, having grown 3 inches within the last 14 days. Its probable growth for this season, may therefore be judged. My opinion is, that it will become by far the handsomest and most graceful tree of its character in cultivation, for single specimens on a lawn, or for forming an avenue. What I have said of this, is applicable to one or two others, which were planted out in different situations. The soil was well drained, and consisted of loam and peat.—*J. Davison Pencarrow, Sept. 27.*—At the present time, the *Cryptomeria* here is 4 feet 3 inches; it was planted in 1847, when little more than a foot high. The soil is a strong loam, inclining to clay, and the situation is a sheltered bank, sloping to the east.—*W. B. Booth, Carclew, Sept. 28.*—We were fortunate enough to get one of the first seedlings sent out by the Horticultural Society, and which is now 7 feet high, though not planted out till this year. Another I have, was planted out in 1846, when about 9 inches high. Its probable growth this year may be stated at 2 feet. It is

growing in an elevated situation, and in light loam — *P. Butler, Woodstock, Sept. 27.*—*Cryptomeria japonica* appears to be a most valuable addition to our ornamental trees. I procured two plants of it in April, 1846, about three inches high, but very weak. I repotted and kept them under glass, until the 15th of June, when I planted them out, and they grew well; the largest being eighteen inches high in the autumn. The following winter did not affect them any more than it did the common arbor vitæ, turning their foliage brown in the same manner, and they stood last winter equally well, without the least protection. The lowest temperature we have had since they were planted out, has been 25 deg. below the freezing point Fahrenheit. The largest plant is now five feet six inches high, and the stem, just above the ground, measures five inches in circumference; its foliage is a most beautiful green, and its habit very elegant.—*Montgomery Henderson, Coleorton Hall, September 11th, 1848.*—A small plant of *Cryptomeria japonica* was received in a large sixty-pot and about six inches high, the second week in Sept., 1845; it was immediately shifted in a large forty-eight, and kept on the stage, in the greenhouse, through the winter; it was again shifted the beginning of February, into a large twenty-four, and in the middle of June, into a large sixteen, still remaining in the greenhouse until the 13th of August, 1846, when a bed was prepared for it in the grass, 8 feet wide, 18 inches deep, filled with a mixture of three-fourths sandy loam, and one-fourth strong loam; it has grown upwards of 4 feet since it was planted out, without any protection all last winter. The height of the plant at this time, Sept. 20, is 7 feet 9 inches.—*P. Bassett, Westonbirt, Tetbury, Gloucestershire.*

We learn that two *Cryptomerias* were planted out in the garden of the Horticultural Society, in spring, 1845. These were not more than 3 or 4 inches high, and were planted in strong clayey soil, where they have been ever since. They are now beautiful bushy plants, growing vigorously. Two others were planted in the summer of 1846, in a peaty soil, amongst the American plants; and they are also growing rapidly.—(*Gard. Jour.*, 1848, p. 243.)

Propagation of Plants.—Some twenty years ago, when I first began cultivation as an amusement, and with the view of benefiting my health, I grew a few auriculas and tulips, but, being a novice, I did not grow them well, and, on my expressing my dissatisfaction at their appearance, to the person of whom I had bought several, and who is a well known grower, he only laughed at me, and said I must give them something better to eat and drink, but without telling me how to do it; this, you will say, was no encouragement, but, being very fond of flowers, I persevered in my endeavors, and, by experience, have learned at least to manage them pretty well. On another occasion, when I was trying to strike some plants, a gardener told me "I need not want to know how to increase any of them, for if I lost what I had, he could easily supply me with more, and at a very reasonable expense." Now, what I contend for, is, that it is not to save the value of the plants thus raised that an amateur studies their cultivation, but it is the pleasure he derives in their culture, and the knowledge it conveys to his

mind, that repays him for his trouble, and an amateur values a plant he has raised, more than five times the intrinsic worth, it having been the object of his care and attention, for months past ; and, in my opinion, the nurseryman and florist, would best consult his own interest, by giving amateurs every reasonable information in the cultivation of the plants they are desirous of growing, and, upon this principle, that a person who can grow any particular flower well, will never be satisfied with what he has, but will seek to improve his stock, by the addition of new varieties ; and where would he be so likely to go to for them, as to the person who had taught him to grow them well ? but if an amateur cannot succeed in the cultivation of his favorite flower, he will cease to grow it, and turn his attention to such plants only, as require little care and trouble. I had hoped that, by this time, nurserymen had become more liberal and enlightened in their opinions, for I am fully convinced, that no man, let him be in what class of life he may, will ever do much good for himself, so long as he cultivates a sordid and narrow-minded feeling towards his fellow-man—(*Gard. Chron.*, 1848. p. 622.)

High Night Temperature in Plant Houses.—Every gardener who pretends to an acquaintance with his profession is now aware of the prejudicial effect of HIGH NIGHT TEMPERATURE. We have repeatedly pressed the subject on his attention : we have shown that, in countries called hot, the thermometer often falls low during the night, and that, to the Vine in particular, night cold is indispensable, and always provided by Nature, where grapes are finest. The well known formation of ice, near Calcutta, although brought about by slightly artificial means, is in itself a beacon to guide the gardener who reflects. In short, the kind of periodical rest, which a low nocturnal temperature secures to plants, is undoubtedly as necessary to them as sleep to animals : it may be broken for a short time with impunity, but it must be provided eventually, and the greater the regularity of it, the better the health of the individual.

The physiological reasons for this are well understood, and need not be explained to-day. That it is a universal provision of Nature, that temperature should greatly diminish in the absence of the sun, is attested by all good meteorological observations on tropical countries, and, in the absence of them, would be sufficiently indicated by the well known effects of the nocturnal radiation to which plants are exposed in starlight nights.

It is probable, however, that no one has been prepared for such a fall of temperature by night, as is recorded in Sir THOMAS MITCHELL'S late Journal, into the interior of tropical Australia. The facts revealed in this interesting work have been fully extracted and made the subject of comment, in the last number of the "*Journal of the Horticultural Society of London.*" For details, the reader is referred to that work. The following is the author's summary of the facts :—

"In the end of April, (our October,) in latitude 82° S., within 44° of the tropic, at an insignificant elevation, the thermometer stood at 26° at sunrise, and was as low as 43° at 9 P. M. ; nevertheless, the country produced wild Indigo, Mimosa, Casuarinas, arborescent Myrtleblooms, and Loranthas. A degree nearer the tropic in May, (our November), the thermometer at sun-

rise marked 20° , 19° , 18° , 17° , 16° , 12° , and, on two separate days, even 11° ! On the 22d of May, the river was frozen, and yet herbage was luxuriant, and the country produced *Nimbas*, *Eucalypti*, *Acacias*, the tropical *Bottletree* (*Delabechea*), a *Calandrinia*, and even a *Loranth*. On the 23d of May, the thermometer at sunrise marking 12° , *Acacia conferta* was coming into flower; and *Eucalypti*, with the usual Australian vegetation, were abundant. On the 30th of May, at the elevation of 1118 feet, the almost tropical *Delabechea* was found growing with the temperature at sunrise 23° and at 9 p. m. 31° , so that it must have been exposed to a night's frost gradually increasing through 12° . And this was evidently the rule during the months of May, June, and July, (our November, December, and January); in latitude 26° S., among *Tristanias*, *Phebaliums*, *Zamias*, *Hoveas*, *Myoporums*, and *Acacias*, the evening temperature was observed to be 29° , 23° , 37° , 29° , 25° , falling during the night to 26° , 21° , 12° , 14° , 20° ; in latitude 25° S., the tents were frozen into boards at the elevation of 1421 feet, the thermometer, July 5, sunk during the night from 38° to 16° , and there grew *Cryptandras*, *Acacias*, *Bursarias*, *Boronias*, *Stenochiles*, and the like. *Cymbidium canaliculatum*, the only Orchidaceous epiphyte observed, was in flower under a night temperature of 33° and 34° ; that by day not exceeding 86° . These facts throw quite a new light upon the nature of Australian vegetation. It may be supposed that so low a temperature must have been accompanied by extreme dryness, and such appears to have been usually the case. Nevertheless, it cannot have been always so, for, although we have no hygrometrical observations for June and July, and only four for May, yet there is other evidence to show that the dryness cannot always have been remarkable. In May, the hygrometer indicated $\cdot 764$, $\cdot 703$, $\cdot 934$, or nearly saturation, and $\cdot 596$; yet the sunrise temperature was on those occasions 25° , 28° , 30° , and 34° . On the 22d of May, the grass was white with hoar frost, and then the thermometer was, at sunrise, 20° under canvas, and 12° in the open air; and, on the 5th of July, when it rained all day, and the tents were 'frozen into boards,' the thermometer sank during the night from 38° to 16° . It is probable that this power of resisting cold is connected with the very high temperature to which Australian vegetation is exposed at certain seasons, and this is horticulturally a most important consideration. We find that, in latitude 32° S., in January, (our July,) the thermometer stood eight days successively above 100° , and even reached 115° at noon; that it was even as high as 112° at 4 p. m.; that in the latter part of February, one degree nearer the line, it was twice 105° and once 110° ; that in March, one degree further northward, it frequently exceeded 100° , and there was not much fall in this excessive temperature, up to the end of April. This will be more evident from the following

Table of Noon-day Temperatures.

Latitude			Max.	Min.
29° S.	Nov., Dec.....	Average of 3 Observ., 102°	103°	62°
32° S.	Jan. Feb.....	" 18 " $97\frac{1}{2}$	115	73
31° S.	Feb., March...	" 17 " 90	110	80
30° S.	March.....	" 20 " 95	105	84

"At this time the dryness must also be excessive, as will have been seen by Sir THOMAS MITCHELL's observations.* Even such heats as these do not, however, destroy the power of vegetation, for we find, in the midst of them, all sorts of trees in blossom; a few bulbs, and even here and there (in damp places, no doubt,) such soft herds as Goodenias, Trichiniums, Helichrysus, Didiscus, Teucrium, Justicia, herbaceous Jasmynes, Tobacco, and Amaranths. During these heats, the night temperature seldom remains high. Sometimes, indeed, the thermometer was observed as much as 88°, and once even 97°, at sunrise, the average noon-heat of the month being 97½°, but generally the temperature is lower. Thus:—

		Temperature Occasionally at Sunrise.	
Nov. and Dec., averaging 102° at noon,		62°, 58°, 61°.	
Jan. and Feb. " 97½ "		61 60 59 47°, &c.	
Feb. and March, " 90 "		61 59 54 48 &c.	
March " 95 "		63 55 51 47 &c."	

Now that winter is approaching, these facts have no small significance. They may console those who fancy that their heating apparatus is defective, because they cannot *force* up the night temperature to 80°; they may teach some clever persons how it happens that the best gardening is often to be found in the worst houses; and they may reconcile the possessor of a glass shed or two, to his not having the command of Lord BIRMINGHAM's iron conservatories, glazed with patent glass, heated with patent pipes and furnaces, and ventilated by patent self-acting calorific anemodoreans.

Another week will give us the opportunity of explaining why, and under what circumstances, a low night temperature is needed by plants; for to-day our limited space is exhausted.—(*Gard. Chron.*, 1848, p. 683.)

Pyramidal Pear Trees on Quince Stocks.—Having many months ago read in the *Chronicle* some remarks in disapprobation of Mr. Rivers's pyramidal pear trees on quince stocks, stating, among other objections, that they were stunted unhealthy trees, and that neither good nor handsome fruit could be expected from them, I beg to forward you the size of a few I have just gathered from trees received from the Sawbridgeworth nursery, only 10 months ago; and I can also affirm that the fruit is remarkably handsome, and appears to be beautifully ripened. My belief is that the wood and leaves of several of these trees would not weigh so much as the fruit they have produced. I must also add, that they are highly ornamental, and, being perfectly upright, are capable of supporting a very heavy crop, in proportion to their size; the leaves are large, and of a fine dark green, showing perfect health; nevertheless, the growth has been moderate, and they are now full of blossom-buds; in a few years, I am confident, they will yield a very considerable supply of fine fruit, and, from their pyramidal form, will cause scarcely any injury to the garden.

* "The humidity of the atmosphere, as indicated by a wet bulb thermometer, does not, however, give such a degree of dryness as might have been anticipated; but it is to be suspected that some errors may have crept into this part of the 'Journal.'"

The management these trees require is evident and easily performed ; undoubtedly they must be watched, but who can possess these beautiful trees and deny himself the pleasure of watching them ? When we have a full grown pear tree of the height, perhaps, of 30 feet, and in full bearing, it may be said there is a balance between the roots and the leaves ; in other words, the roots are only strong and numerous enough to produce leaves and blossom-buds and fruit, but no additional shoots ; on the other hand, every young tree has a tendency to produce more roots than are sufficient to maintain it in a dwarfish form and fruitful state, and if these roots remain undisturbed, the shoots will grow vigorously, and require severe pruning, and the fruit-buds will of course proportionately decrease ; and as the growth depends entirely upon the quantity of matured leaves, it follows, if we want a dwarf tree, we must, as soon as it has reached the required size, limit the number of leaves to that point at which roots will not stimulate the tree to produce injurious growth.

On the above principle, remove every leaf on every shoot, down to the point to which you propose to prune, and as soon as it can be done without danger to the blossom-buds, cut these shoots all away, and in winter root-prune ; but if you have had no occasion to leaf-prune, you will also have no occasion to root-prune in the winter ; and if the tree is as large as you wish it to be, well shaped, and has fine leaves and good fruit, it is perfect. On the other hand, if you have neglected root-pruning where it was needed in the winter, and have permitted, by way of safety to the blossom-buds, the terminal shoots to grow all through the summer, the tree will become so vigorous, and a habit of rank growth will have been so thoroughly established, that the tree must be half killed by excessive root-pruning, to reduce it to a disposition to produce spurs instead of shoots, and then disease, small leaves, and bad fruit, as named by the writer alluded to, may very likely follow. If leaf-pruning is not liked, nip off every shoot as soon as it reaches the allotted limit ; if it shoots again, nip it off one leaf beyond this point, and repeat this until it ceases to grow ; this will not injure the blossom buds, provided the tree has been duly root-pruned ; in the winter cut the shoot back just beyond the point at which it was first nipped. Let the trees be well mulched, and also well watered through the spring, and the fruit will set well and grow large ; towards autumn, draw away the mulching and withhold water, and the fruit will ripen perfectly on the latest sorts and be good flavored, and the buds will be plump and bold for the next season. As soon as a tree has acquired the size determined upon, if root-pruning be properly performed, it will require scarcely any leaf-pruning, or nipping, or winter-pruning.

In the early management of these trees, I prefer constantly taking off the leaves to shortening the shoots ; I have this year brought a Crassane pear of 30 years' growth, and which never produced a tenth part of a crop, into the most promising state as respects blossom-buds, merely by leaving all the spring-produced foreright shoots, and taking all the leaves from them ; the leaves on the spurs are unusually large, but not a single summer shoot has been produced. I should also state that this tree has been pruned in various ways, sometimes by removing all the foreright shoots, sometimes

by leaving them all on, and at other times by breaking them down and letting them hang, and again by removing half and shortening the other half in July, and removing entirely in winter; but, in all these various modes, summer shoots, so destructive to blossom-buds, have been produced from the spurs, and leaf-pruning has cured this apparently incurable evil.

Circumference of the Pears.

Napoleon	9 in. by 8	Jalvie	9 in. by 8
Le Curé	10 " 8	Beurré d'Arenberg	8½ " 8
Passe Colmar doré	7½ " 7	Gratioli of Jersey	9 " 8½
" Gris	7½ " 7	Louise Bonne of Jersey	9 " 7½
St. Germain	7 " 6	Beurré d'Amanlis	9½ " 8½
Doyenné Goubault	7½ " 7	Beurré de Capiaumont	8½ " 7
Easter Beurré	10 " 8½	Thompson's	7½ " 7½
Colmar d'Arenberg	10½ " 10½		

The Easter Beurré is the only tree not planted last autumn.—(*Gard. Chron.*, 1848, p. 684.)

ART. II. *Domestic Notices.*

Liberal Premiums for Seedling Grapes.—Mr. Longworth, at the last meeting of the Philadelphia Horticultural Society, offered the following premiums, remarking, previously, that if we wished to improve the quality of our hardy grapes, we must raise from their seed, or seed from a crop between our native grapes and the best European varieties:—

Fifty dollars for a seedling Catawba, of white, blue, or black color, equal to the original.

The same, for one of like color and quality, from the Ohio grape.

The same, for one of like color and quality, from the Herbedmond grape.

The same, for one of like color and quality, from the Missouri grape.

Mr. L. says, that, as regards color, it is not as difficult of accomplishment as might be supposed. But few Catawba seedlings have been raised in Cincinnati yet; among them were three white ones.

In raising from seed, the leaf will indicate what the quality of the fruit will be, and much work may be avoided by throwing out all, whose foliage is not as promising as that of the purest plant.—(*Newspaper.*)

Annual Exhibition of the New Bedford Horticultural Society.—Dear Sir,—The Second Annual Exhibition of the New Bedford Horticultural Society was held on the 27th, 28th, and 29th of September last, at the City Hall in this city. The show was very fine, and elicited the admiration of every one who visited the Hall. The enclosed are the reports of the several committees upon the occasion which you are at liberty to notice in your Magazine of Horticulture, (should you choose to do so,) in any manner which you may deem proper.—*Yours, very truly, H. H. Crapo, New Bedford, October 20th, 1848.*

[The Report is quite interesting, and would occupy seven or eight pages of our Magazine. Not having any room this month, we shall endeavor to give an abstract of it in our December number.—*Ed.*]

Horticultural Humbugs.—There are numbers of these which take periodical journeys in the papers, and are thus "rescued" as the *Prairie Farmers* say, "from drowning." Among them, we may class the mode, so highly

recommended by one of our horticultural journals, of *inserting buds of trees bottom upwards to make them weeping!* The plan of doing this was *actually witnessed in a nursery near the city of Derby, Eng.*; at least, so says the writer. A friend of his in Brooklyn, N. Y., tried the plan on cherry trees, and, as the experiment did not succeed, he attributed it to not carrying out the plan by "*coopering*" them, as you would a barrel, that is, hoop down the shoots! The writer is really anxious that every body should at once set about making weepers of their fruit trees, for the reason, as he gallantly urges, "that our better halves should not expose themselves to danger by clambering up ladders to pluck the fruit." The editor, in a note, seriously states that the "account of the effects produced by reverse budding is very interesting to the curious amateur."—*Ed.*

Gen. Hand Plum.—A notice and brief description of this new plum will be found in our Magazine for 1846, (Vol. XII., p. 248,) which was, we believe, the first time it was made known to the public. Messrs. Sinclair & Corse, of Baltimore, showed us a fine drawing of the fruit: from them we obtained trees which have not yet come into bearing: it has a high reputation as a large and superior variety.—*Ed.*

Abutilon venosum can be made quite a large shrub if planted out on a good exposure in May or June; the *striatum* I have found a shy bloomer when turned out; not so *venosum*, which is now, Sept. 15, a stately shrub some seven feet high, with a fine crop of its deeply veined crimson flowers, each one as large as an inverted cordial glass,—the foliage of a deeply glossy green.—*Yours, G. C. T., Astoria, N. Y.*

Great National Convention of Fruit Growers at New York.—Agreeably to the notice which was issued by the American Institute, and which was copied into our columns, (p. 423,) the Central Convention of Fruit Growers met at Judson's Hotel, Broadway, New York, on the 10th of October. The room not being sufficiently spacious to accommodate all the delegates, and at the same time afford ample room to display the great quantity of fruit sent for examination, the meeting adjourned to Clinton Hall. Between one and two hundred delegates were present, from ten or twelve different States, and, after a temporary organization, the following officers were elected:—

M. P. Wilder, Boston, *President*. H. H. Crapo, New Bedford, Mass.; Dr. W. D. Brinkle, Penn.; H. W. S. Cleaveland, N. J.; J. A. McIntosh, Ohio; M. Y. Taylor, Va.; L. Young, Ky.; R. Mattison, Vt.; Dr. A. R. Munson, New Haven, Conn.; Thos Allen, St. Louis, Mo.; Dr. R. S. Underhill, New York, *Vice Presidents*. R. B. Parsons, Flushing, L. I., Geo. B. Deacon, Burlington, N. J., and P. Barry, Rochester, N. Y., *Secretaries*.

A special fruit committee of nine was appointed to present a list of fruits, worthy of general cultivation, and report upon some of the varieties presented for examination. Other committees were also appointed, of which we shall give some account, when the proceedings are published. A list of apples, pears, peaches, cherries and plums, was presented to the Convention for their approbation, which, after considerable discussion, was adopted with several alterations. Discussions also took place upon many new and choice fruits, particularly pears. A general fruit committee was

appointed, consisting of five persons from each State in the Union, and the Canadas; the President being, *ex officio*, a member. The objects of the committee are to report the results of their correspondence and labors at the next session. They are also instructed to report a list of such varieties as are decidedly unworthy of cultivation. The secretaries of the convention will compare and collate their notes, and prepare a full report of the doings of the convention, which report will be published and sent to every delegate and to every horticultural and other kindred society in the country. After a sitting of three days, it was voted at a late hour, on the last evening, to adjourn to the first Tuesday of October, 1849, then to meet in New York, under the title of the "American Congress of Fruit-growers," a name which was adopted by a small majority of the delegates present.

There was a very fine exhibition of fruit, and by far the most attractive part of the display was a basket, containing about *half a bushel*, of splendid specimens of Swan's Orange pears, from Syracuse, N. Y. Some superb Northern Spy apples were exhibited by J. H. Watts, Esq., of Rochester. A full list of the contributors, with a list of their fruits, will appear with the report of the convention.

Subsequently to our writing the above paragraph, we found the list of fruits recommended by the convention published in the *Tribune*, which we here copy. At the time the list was read to the convention, we forgot to note down the names in the order in which they were reported:—

Peaches—Varieties recommended for general cultivation—Grosse Mignonne, Early York, (serrated,) Old Mixon free, Coolidge's Favorite, Crawford's Late, Bergen's Yellow. For particular localities—Heath Cling.

Plums—Varieties recommended for general cultivation—Jefferson, Washington, Green Gage, Purple Favorite, Coe's Golden Drop, Bleeker's Gage, Frost Gage, Purple Gage. For particular localities—Prince's Imperial Gage.

Cherries—Varieties recommended for general cultivation—Black Eagle, Mayduke, Graffion or Bigarreau, Black Tartarian, Elton, Knight's Early Black, Downer, Downton.

Apples—Varieties recommended for general cultivation—Early Harvest, American Summer Pearmain, Bough, Gravenstein, Summer Rose, Early Strawberry, Fall Pippin, Rhode Island Greening, Baldwin, Roxbury Russet. For particular localities—Yellow Bellflower, Swaar, ~~Esopus~~ Spitzenberg, Newtown pippin.

Pears—Varieties recommended for general cultivation—Madaleine, Dearborn's Seedling, Bloodgood, Tyson, Williams's Bon Chrétien, Seckel, Louise Bonne of Jersey, Flemish Beauty, Beurré Boeuf, Winter Nelis, Beurré d'Aremberg, Golden Beurré of Bilboa. For certain localities—White Doyenné, Gray Doyenné.

ART. III. *Massachusetts Horticultural Society.*

Owing to the great length of the Report of the Festival, in our last number, we were obliged to defer the report of the chairman of the Committee

of Arrangements, of the twentieth annual exhibition, giving the names of contributors, and a list of the flowers, fruits and vegetables exhibited, together with the award of premiums, to the present number. The report is of considerable length, but we believe it will be found interesting to all cultivators of fruit, and we therefore present it without abridgment :—

REPORT OF THE PLANTS, FLOWERS, FRUITS AND VEGETABLES EXHIBITED.

PLANTS.—From the President of the Society, a great variety of plants, consisting of camellias, orange trees, &c. From J. A. Lowell, upwards of thirty fine specimens of plants, including *Strelitzia regina*, and *augusta*, *Araucaria excelsa*, and *imbricata*, Sago Palm, Coffee Tree, *Alpinia nutans*, *Hibiscus splendens*, *Russellia juncea*, *Dracæna fragrans*, *Hedychium flavum*, *Magnolia grandiflora*, &c. From Hovey & Co., twenty beautiful plants, among which were *Psidium Cattleianum*, (Guava) *Russellia juncea*, *Erica Bowiedana*, *Amaryllis* sp., *Leschenaultia formosa*, *Crœwea saligna*, *Achimenes* of sorts, *Fuchsia Acantha*, &c. From Geo. C. Crowninshield, by J. Quant, twenty plants, including *Veronica Lindleyana*, *Rondeletia speciosa*, *Russellia juncea*, *Achimenes*, and other plants. From J. Cadness, a large collection of plants, and upwards of twenty species and varieties of the Cacti tribe; some of the plants were *Abutilon Bedfordianum*, *Abelia rupestris*, *Anemone japonica*, *Calystegia pubescens*, *Ixora rosea*, *Cryptomeria japonica*, *Acacia linearis*, several camellias, &c. &c. From T. Needham, a variety of plants. From T. Murray, Dedham, 5 pots of coxcombs. From T. Liversidge, Dorchester, a fine orange tree, and other plants. From Messrs. Winship, a variety of plants. Plants were contributed by other individuals, but we were unable to ascertain the names.

DAHLIAS, ASTERS AND CUT FLOWERS.—From the President of the Society, a variety of fine dahlias. From L. Davenport, a fine lot of roses and dahlias. From J. Parker, fine dahlias. From Breck & Co., dahlias and cut flowers. From B. K. Bliss, fine coxcombs. From J. Nugent, dahlias and cut flowers. From H. T. Hazeltine, asters, roses &c. From J. Cadness, dahlias and cut flowers. From Hovey & Co., cut flowers in variety. From J. Albee, dahlias, roses &c. From F. R. Bigelow, flowers of *Cereus triangularis*. From J. Hovey, dahlias, roses &c. From P. Barnes, dahlias and cut flowers. From A. Aspinwall, roses in variety.

BOUQUETS OF VARIOUS KINDS, BASKETS OF FLOWERS, DESIGNS, &c.—From Messrs. Hovey & Co., two large bouquets for the Bradlee vases, and two large parlor bouquets. From T. Cowan, gardener to Col. Perkins, two large bouquets for the Society's vases. From J. Cadness, one large round bouquet, and two mantel bouquets. From P. Barnes, a large grass bouquet, and a neat little design. From Mrs. J. Dyer, a handsome design. From Miss Russell, a neat design, representing an arbor. From B. K. Bliss, a handsome design. From Jas. Nugent, two bouquets. Grass bouquets by Mrs. E. Parker and J. Mann. Bouquets by Winships, J. Hovey, and others. Designs of various kinds, by M. E. C. Brown, Miss Mary Kenrick, J. Gilmore, J. Sheehan, S. A. Walker, and others.

FRUITS.—From the President of the Society, one hundred and seventy-five varieties of pears, viz:—Andrews, Angleterre Noisette, Ananas, (French,) Ah! Mon Dieu, Alpha, Belle Angevine, B. d'Angers, Belle Lucrative, B. d'Esquermes, B. Excellente, B. et Bonne, B. et Bonne de Hee, B. Caennais, B. Craonnaise, B. de Trois, Beurré d'Aremberg, B. d'Anjou, B. d'Amanlis, Angleterre, Beurré Beauchamps, B. Beaulieu, B. Bronze, (French,) B. Bosc, B. Beauréal, B. Brown, B. de Capiaumont, B. Coloma, B. Cutter, B. Diel, B. Imperiale, B. Goubault, B. Gens, B. Kenrick, B. Golden, (Rivers,) B. d'Elberg, B. de Rhine, B. Triguier, B. Easter, B. Knox, (true,) B. Nerckman, B. gris d'hiver nouveau, B. Moiré, B. Noirchain, B. Rance, B. Spence, (?) Bon Chrétien Williams's, B. C. Fondante, B. C. Winter, Bergamotte Cadette, B. Gansel's, Buffum, Belmont, Bleeker's Meadow, Bezi de la Motte, B. des Vétérans, Black Worcester, Brougham, Bankerbine, Bean present d'Artois, Bezi Vaet, Bezi de Montigny, Bonne Ente, Benoist, Cadet de Vaux, Catillac, Chaumontel Belge, C. Anglaise, Colmar Van Mons, Colmar d'Aremberg, C. du Lot, Columbia, Comte de Lamy, Comtesse de Lunay, Captif St. Helene, Cushing, Delices de Jodoigne, Dunmore, Dix, Duchesse d'Angouleme, D. d'Orleans, Doyenné blanc, D. grey, D. gris d'hiver nouveau, D. Musqué, Dingler, Drake, (Edwards's,) De Lepine, Eyewood, Edwards's Summer, Epine d'hiver, E. Dumas, Echasserie, Enfant Prodigue, Exguis, Fulton, Fortune, Figue de Naples, Flemish Beauty, Fondante du Bois, F. de Charneuse, Frederic of Wurtemberg, Gilogil, Glout Morceau, Girardin, Gendeshheim, Glout Morceau de Cambrone, Green Sugar, Gros Romain Carmelite, Heathcot, Hericart, Inconnue Van Mons, Jalousie de Fontenay Vendee, Jalvie, Juvardelle, Jalousie nouvelle, Knight's Seedling, (R. I.,) King Edward, Lawrence, Louise Bonne of Jersey, Le Curé, Leon le Clerc, Long Green (of Cox), Monarch, Madotte, Mansuette, Marie Louise, McLaughlin, Napoleon, Ne plus Meuris, Pater Noster, Poire de Conde, P. de Jacob, Passe Colmar, Paradise, Passe Tardive, Queen Caroline, Ridelle, Roi de Rome, Rousselet de Rheims, R. d'Hiver, St. Michael Archange, Sanspareil, Seckel, St. Germain, (Prince's,) St. G., Edwards's, St. G., Uvedale's, St. Andre, Sieulle, Sucre Verte, Sargeret, Stuyck, St. Denis, St. Laurens, St. Francois, Soldat Laboureur (Belgique,) Souverain d'hiver, Sans pepins, Salvata, Swan's Egg, Thompson's, Tarquin, Unknown sorts, Urbaniste, Verte longue d'Automne panaché, Voix aux Prêtres, Vicomte de Spoelberch, Van Mons No. 65, Van Mons Leon le Clerc, Winter Nelis, Wilbur, Whitefield, Wilkinson, Waterloo. Plums—Coe's Golden Drop, Merveille, (new,) Reine Claude de Bavay, (new,) (?) St. Catharine. Apples—Gravenstein.

From the Pomological Garden of R. Manning, two hundred and sixty sorts of pears, viz.:—Ambrosia, Ananas d'Ete, Andrews, Althorpe Crasane, Alpha, Aston Town, Bruno de Bosco, Bergamotte d'Automne, Black Worcester, Bezi de Montigny, Beurré Witzhumb, B. Van Marum, B. Crapaud, B. Kenrick, B. Rance, B. Angleterre, B. d'Aremberg, B. Adam, B. Bolwiller, B. Diel, B. Amandes, B. Thouin, B. d'Amanlis, B. Easter, B. Brown, B. Golden of Bilbao, B. Delbecq, B. Bosc, Bleeker's Meadow, Bergamotte Parthenay, Bourdeaux, Bergamotte Fortunee, Brougham, Bon

Chrétien Fondante, B. C. Williams's, Belle Fondante, B. Lucrative, Bergamotte Cadette, Bishop's Thumb, Burgomaster, Bezi de la Motte, Bois Napoleon, Bonne Louise, Brugman's Birne, Brande's St. Germain, Buffum, Belle et Bonne, Bergamot Neill, Cross, Comte de Lelieur, Colmar Epine, Calebasse Monstreuse, Comte de Lamy, Caroline, Columbia, Capucin, Croft Castle, Capsheaf, Beurré de Capiaumont, Capucin V. M., Catillac, Caillot Rosat, Chaptal, Caen du France, Coter, Calebasse, Clinton, Charles of Austria, Citron of Bohemia, Crassane, Clara, Coloma, Chaumontelle, Cuvelier, Colmar Neill, Cabot, Dearborn, (of Van Mons,) Du Parrain, Duchesse d'Angouleme, Duchesse d'Orleans, Dix, Doyenné Boussock, D. d'Hiver, D. Gris, D. Blanc, D. d'Alencon, D. Louis, D. Blanc Picti, Dundas, Dunmore, Duchesse de Mars, Delices d'Hardenpont, Eyewood, Endicott, Emerald, Easter Bergamot, Epine d'Ete, Flemish Beauty, Flemish Bon Chrétien, Figue of Naples, Fulton, Frederic of Wurtemberg, Fantasia Van Mons, Flemish Sabine, Foster's St. Michael, Glout Morcean, Gilgil, Gendesheim, Gansell's Bergamot, Green Sugar, Henry IV., Hadley, Hunt's Connecticut, Hathorne's Seedling, Heathcot, Hacon's Incomparable, Henriette, Hericart, Henri Van Mons, Harvard, Huguenot, Jaminette d'Hiver, Jalousie, Jean de Witte, Jaminette, Jalousie de Fontenay Vendee, John Dean, Juvardelle, Jubin, Johonnot, King Edward, Lincoln, Le Curé, Leon le Clerc, three vars., Long Green of Duhamel, Louise Bonne of Jersey, L. B. Real, Long Green, Lederbirne, Las Canas, Locke, Lewis, March Bergamot, Muscadine, Meuris d'Hiver, Marie, Manning, Marie Louise, Moccas, Messire Jean, Monarch, (false,) Miel de Waterloo, Madotte, Marulis, Napoleon, Ne plus Meuris, Prince's St. Germain, Pitt's Marie Louise, Plombgastel, Paradise d'Automne, Pomme Poire, Petre, Princesse of Orange, Passe Colmar, Pope's Russet, Pater Noster, Pennsylvania, Paillau, Parmentier, Queen of the Low Countries, Quetelete, Rouse Lench, Rameaux, Raymond, Rousselet de Rheima, R. de Meester, R. d'Esperen, Ronville, Reine des Piores, Seckel, Seedling, Surpasse Virgoulouse, Souverain, Sickler, Sanspareil, St. Germain Tilloy, St. Bruno, St. Germain, Spanish Bon Chrétien, Sieulle, Sovereign of Spring, Sullivan, Serrurier d'Automne, Schooling Merry, Stevens's Genesee, St. Ghislain, Swiss Bergamot, Superfondante, Shobden Court, Thompson's, Tillington, Uvedale's St. Germain, Urbaniste, Van Mons Leon le Clerc, Vacat, Van Assene, Whitfield, Winter Crassane, Winter Nelis, Wilkinson, Winter Quince, Washington, Williams's Early, Wurzer d'Automne, fifteen varieties unknown, and the following Nos. of Van Mons:—No. 135, 177, 182, 365, 698, 858, 879, 968, 969, 982, 1028, 1036, 1074, 1082, 1253, 1258, 1325, 1451, 1454, 1482, 1535, 1602, and five vars. unknown.

Apples—one hundred and eighteen varieties, viz.:—Aunt Hannah, Acton Spice, Ananas, Alfriston, American Golden Pippin, Brabant Bellflower, Black Apple, Baldwin, Boxford, Ben, Black Coal, Beauty of Kent, Beachamwell's, Bickley's White Sweet, Cambuthnethum, Crow's Egg, (!) Cornish Aromatic, Chandler, Corse's Sweeting, Danvers Winter Sweet, Drap d'Or, Denmark, Downton Pippin, Dumelow's Seedling, Dutch Codlin, *Æsopus* Spitzenberg, Edward's Russet, English Summer Pearmain, Eng-

lish Golden Russet, Fall Harvey, Framata Rosa, Fameuse, Fallawater, Fearn's Pippin, Fenouillet Rouge, Granny Earl, Gravenstein, Green Sweet, Hay Boys, Grey French Reinette, Gloucester, Hubbardston Nonsuch, Haskell Sweeting, Holland Pippin, Hoary Morning, Ipswich Seek-no-Further, Jonathan, Kraam, King of the Pippins, Hampshire Green, King Philip, Lovett Sweeting, Lucombe's Seedling, two vars., Leyden Pippin, Lyman's Pumpkin Sweet, Lyscom, Large Burden, Minister, Maiden's Blush, Murphy, Mela Carla, Morgan's Royal, Morgan, Merchants' Reding, Nonsuch, Needles, Newark Pippin, Ortley Pippin, Pumpkin Sweet, Pen-nock's, Pigeonette, Pelham Sweet, Pound, Pomme Royale, Pearson's Plate, President, Porter, Pownal Spitzenberg, Priestley, Rawles' Janet, Ribstone Pippin, Rose of Sharon, Rhode Island Greening, Rymer, Ramsdell's Red Pumpkin Sweet, Roxbury Russet, Rambour Franc, Red Calville, Roe's Sweet, Rambo, Roman Stem, Russet Pearmain, Spice Sweet, Swan's Pine, Swaar, Sam Young, Scarlet Nonpareil, Sparhawk's Spring Greening, Slug Sweeting, Strawberry, Templeton, Winter Sweet, Turn of the Lane, Vermont Sweet, Vandervere, two vars., Wormsley Pippin, Winesap, Wellington, two vars., Winter Sweet Paradise, Wells Sweeting, Winter Queen, Wing Sweeting, Waterman Reding, Warner Russet, Yellow Bellflower.

From Messrs. Hovey & Co., one hundred and ten varieties of pears as follows:—Aboricrite, Angleterre, Beurré d'Aremberg, B. Brown, B. d'Amanlis, B. de Capiaumont, B. Diel, B. Easter, B. Rance, B. Romaine, B. d'Anjou, B. de Moiré, B. de Beaumont, B. Bosc, Belle et bonne de Hee, Belle et Bonne, Belle Lucrativé, B. Epine Dumas, B. Heloise, B. Henriette, B. de Thouars, B. d'Esquermes, Bergamotte de Bruxelles, B. Cadette, B. Parthenay, Bon Chrétien Williams's, B. C. Spanish, B. C. Fondante, Belmont, Chaumontelle, Comte de Lamy, Cross, Colmar d'Aremberg, C. Du Lot, Chaptal, Coter, Doyenné blanc, D. Boussock, D. Santelete, D. Musqué, Duchesse de Mars, D. d'Angouleme, D. d'Berri, Dunmore, Duvernay, Dumortier, Esperine, Flemish Beauty, Forelle, Figue de Naples, Fondante Rouge, Glout Morceau, Grosse Calebasse, (Jamin,) Hull, Leon le Clerc, (old,) Leon le Clerc Van Mons, Louise Bonne of Jersey, Le Curé, Las Canas, Marie Louise, Monarch, (Knight's,) Madotte, Napoleon, Ne plus Meuris, Passe Colmar, Poire Henriette, Rousselet de Rheims, Seedling Maria, Seckel, Styrian, Sargeret, (V. M.), Soldat Labourer (!) Sieulle, Verte longue d'Automne, Vicompte de Spoelberch, six kinds unnamed, and the following "new varieties," viz.:—Adele de St. Denis, Belle Apres Noel, Beurré Baud, B. Supreme, B. Benoits, Bezi Veterans, Bonne des Zees, Captif St. Helene, Dangler, Duc de Bourdeaux, Episcopal, Ferdinand de Meester, Girardin, Inconnue Van Mons, Jersey Gratioli, Poire de Carisie, St. Nicolas, St. Denis, Triomphe de Jodoigne, Truckhill Bergamot, and 292 of Van Mons. Apples, viz.:—Baldwin, Court Pendu, Carthouse, Downton Pippin, Hawthornden, Hormead Pearmain, Hertfordshire Pearmain, James River, Jonathan, Pleasant Valley Pippin, Russet, (!) Roxbury Russet, R. I Greening, Sturmer Pippin, three varieties unnamed. Grapes, viz.:—Bourdela's, Black Prince, Black Hamburg,

B. H. Wilmot's, B. H. No. 16, Chaptal, (new,) Chasselas of Fontainebleau, De Candolle, (new,) Esperione, Frontignan White, F. Grizzly, Golden Chasselas, Moranet, (new,) Muscat Blanc Hatif, M. of Alexandria, M. of Tottenham Park, M. of Portugal, M. Cannon Hall, M. de la mi Aout, Syrian, Scharges Henling, (new,) White Nice, Zinfindal, Guavas (*Psidium Cattleianum*.) Melons—Beechwood, Christiana, Nutmeg, Peach, Persian. Peaches—Favorite, Sweetwater, White Ball. Oranges and lemons.

From S. Walker, eighty-two varieties of pears, viz.:—Andrews, Ananas, Angora, Belle et Bonne, Boucquia, Belle et Bonne de Hee, Bergamot Gansell's, B. Hampden's, Beurré d'Aremberg, B. Brown, B. de Capiaumont, B. Diel, B. Duval, B. Easter, B. Rance, B. Golden of Bilbao, B. d'Anjou, B. Picquery, Bezi Vaet, Bicknal, Bon Chrétien Williams's, Broom Park, Chaumontelle, Chaptal, Colmar d'Ete, Champagne, Colmar d'Autumn, Comte de Lamy, Columbia, Crassane, Crassane, (Winter,) Crassane Althorpe, Dix, Doyenné White, D. Gray, D. Rouge, D. Dore, Duchesse d'Angouleme, Dunmore, Delices de Jodoigne, Epine Dumas, Eyewood, Flemish Beauty, Fondante Van Mons, Figue, F. de Naples, Gilgil, Gendesheim, Glout Morceau, Hacon's Incomparable, Johannot, Lawrence, Louise Bonne of Jersey, Messire Jean, McLaughlin, Monarch, (Knight's,) Moorfowl Egg, Martin Sec, Napoleon, Ne plus Meuris, Payency, Passe Colmar, Queen of the Low Countries, Rousselet de Rheims, Rousselette, (Owen's,) Seckel, St. Germain, St. Ghislain, St. Mesmire, Seckel, Swan's Egg, Stone, Tyson, Urbaniste, Van Mons Leon le Clerc, Verte Longue d'Automne, Voix aux Pretres, Winter Nelis, Williams's Early, and one unknown.

From B. V. French, seventy-three varieties of apples, viz.:—Adam's Sweet, Black Apple (of Cox,) Blenheim Orange, Burrasoe, Baltimore, Been Apple, Blooming Red, Baldwin, Carada Reinette, Dutch Codlin, Dominisky, or Lord's, Danvers Winter Sweet, Æsopus Spitzenberg, French's Sweet, Fallawater, Fearn's Pippin, Fall Greening, Gardner's Sweet, Gravenstein, Golden Russet, Garden Striped, Hoary Morning, Hawthornden, Hubbardston Nonsuch, Jonathan, Kenrick's Autumn, Long Nonsuch, Long Russet, Lucombe's Seedling, Lyscom, Murphy, Monstrous Pippin, Mela Carla, Nonsuch, Nonpareil, Porter, Pomme d'Api, Pumpkin Sweet, Peck's Pleasant, Russet, (sweet,) Pearmain, Pennock, Royal, Ruggles, Ross's Nonpareil, Roxbury Russet, Rhode Island Greening, Sweet Greening, Seaver's Sweet, Sugar Sweet, Seek-no-further, (from Hingham,) Seek-no-further, Wine, Winter Gilliflower, Spice, Wales, Wellington, Yellow Bellflower, Newtown Pippin; six varieties names lost, and seven unknown. Pears, viz.:—Beurré Bosc, B. Van Marum, B. de Capiaumont, Duchesse d'Angouleme, Grosse Bruzelles, Heathcot, Harvard, Le Curé, Long Green, Messire Jean, Seckel, Passe Colmar, Tillington. Peaches, viz.:—Crawford's Late, Oldmixon free.

From O. Johnson, sixty-three varieties of pears, viz.:—Angleterre, Beurré Brown, B. d'Aremberg, B. d'Amanlis, B. Bronze, B. Diel, Bufum, Bleeker's Meadow, Bezi de la Motte, Belle et Bonne, Calebasse,

Catillac, Cushing, Duchesse d'Angouleme, Doyenné blanc, Dix, Echarserie, Epine d'Ete, Easter Beurré, Flemish Beauty, Frederic of Wurtemberg, Franc Real d'Hiver, Glout Morceau, Gilgil, Harvard, Henry IV., Hacon's Incomparable, Hericart, Jalousie, Johannot, Lewis, Louise Bonne of Jersey, Lawrence, Moccas, Marie Louise, Martin Sec, Marquise, Napoleon, Princess of Orange, Passe Colmar, Prince's St. Germain, Pope's Russet, Rousselet de Rheims, R. Panaché, Seckel, St. Ghislain, Uvedale's St. Germain, Urbaniste, Vallée Franche, Verte Longue, Le Curé, Winter Nelis, Washington, Williams's Bon Chrétien, and seven kinds unknown. Grapes—Black Hamburg, White Chasselas, White Muscat of Alexandria, Zinfindal. Two varieties of apples. Four varieties of peaches. Four varieties of plums.

From J. S. Cabot, sixty-six varieties of pears, viz. :—Althorpe Crassane, Andrews, Beurré Diel, B. d'Aremberg, B. Moiré, B. Curtet, B. de Capiaumont, Bon Chrétien Fondante, Louise Bonne of Jersey, Bezi de la Motte, Belle d'Esquermes, Bergamot Gansell's, Boucquia, Cushing Catillac, Capucin, Comte de Lamy, Croft Castle, Columbia, Chaumontelle, Capsheaf, Cross, Colonel's Water, Doyenné d'Hiver, Duvivier, Easter Beurré, Enfant Prodigue, Fulton, Fig Extra, (Van Mons,) Fondante Rouge, Flemish Beauty, Fortune, Great Citron of Bohemia, Gendeshaim, Golden Beurré of Bilboa, Henry IV., Hericart, Jalousie, Long Green, Lewis, Urbaniste, Long Green of Europe, Messile d'Hiver, Muscadine, Marie Louise nova, Paradise d'Automne, Payency, Princess of Orange, Poire Rameaux, P. Gorand, Queen of the Low Countries, Rousselet Precoc, St. Andre, Summer Rose, Surpasse Virgoulouse, St. Ghislain, Seckel, Seedling Maria, Surpasse St. Germain, Sucre Vert, Pennsylvania, Thompson's, Winter Nelis, Wilkinson.

From J. Lovett, twenty-six varieties of pears, viz. :—Althorpe Crassane, Andrews, Beurré Bosc, B. Diel, B. d'Amanlis, Bergamot Gansell's, Catillac, Dunmore, Flemish Beauty, Belle Lucrative, Fulton, Great Citron of Bohemia, Harvard, Golden Beurré of Bilboa, Jalousie, King Edward, Louise Bonne of Jersey, McLaughlin, Marie Louise, Madotte, Pitt's Prolific, Summer Franc Real, Urbaniste, Winter Nelis, Williams's Bon Chrétien.

From Cheever Newhall, twenty-four varieties of pears, viz. :—Althorpe Crassane, Beurré Diel, B. d'Aremberg, B. d'Amanlis, Bleeker's Meadow, Chaumontelle, Dunmore, Dix, Frederic of Wurtemberg, Fulton, Harrison's Autumn, Heathcot, Knight's Seedling, Louise Bonne of Jersey, Long Green, Lawrence, Le Curé, Marie Louise, McLaughlin, Napoleon, Oliver's Russet, Rousselet de Rheims, Urbaniste. Apples, viz. :—Domine, Fameuse, Golden Pippin, Gravenstein, Porter, R. I. Greening, Rambo, Ribstone Pippin, Snow Apple, Seaver Sweet, Wine. Plums, viz. :—Coe's Golden Drop, Orleans, Prune d'Agen. Peaches—Early Crawford, Old Mixon free.

From F. W. Macondry, thirty-seven varieties of pears, viz. :—Arch Duke Charles, Andrews, Belle et Bonne, Beurré Moiré, B. Brown, B. Diel, B. Picquery, B. Easter, B. d'Amanlis, Bezi de la Motte, Black Worcester, Chaumontelle, Crassane, Catillac, Calebasse Bosc, Dix,

Doyenné Grey, Figue de Naples, Fortunee, Flemish Bon Chrétien, Glout Morceau, Long Green of Autumn, Louise Bonne of Jersey, McLaughlin, Marie Louise, Napoleon, Prince's St. Germain, Queen of the Low Countries.

From Messrs. Winship, thirty-three varieties of pears, viz. :—Althorpe Crassane, Angleterre, Belle et Bonne, Beurré Diel, B. de Capiaumont, B. Rance, B. d'Hiver, B. doré, Bergamotte de Paysans, B. de Pacques, Belle Lucrative, Cumberland, Catillac, Dunmore, Duchesse d'Angouleme, Fulton, Fortunee, Glout Morceau, Heathcot, Jalousie de Fontenay Vendee, Louise Bonne of Jersey, Lewis, Moorfowl Egg, Napoleon, Passe Colmar, Rousse Lench, Sargeret, Winter Nelis, Wilkinson. Apples—London, Leadington, Grand Sachem.

From Warren's Garden, forty-four varieties of apples, viz. :—Atwater, Alexander, Bellflower, Baldwin, Blue Pearmain, Captain, Danvers Sweet, Detroit, Early Russet, Egg Apple, Gardner Sweeting, Golden Russet, Hubbardston Nonsuch, Hawthornden, Long Nonsuch, Lancaster, London, Minister, N. Y. Greening, Old Pearmain, Pumpkin Sweet, Porter, Prince Charles, Fameuse, Roxbury Russet, Rhode Island Greening, Ribstone Pippin, Red Siberian, Red Bellflower, Sweet Russet, Spice, Spitzenburg, Seedling, Striped Spice, Vandervere, Warren's Spice, Yellow Bellflower, Yellow Siberian, and five other kinds. Pears, thirty-eight varieties, viz. :—Andrews, Buffum, Bezi de la Motte, Black Worcester, Bezi de Montigny, Beurré Diel, Crassane, Catillac, Duchesse d'Angouleme, Easter Beurré, Flemish Beauty, Golden Beurré of Bilboa, Glout Morceau, Gansell's Bergamot, Heathcot, Julienne, Marie Louise, Napoleon, Seckel, Verte longue Panache, Winter Nelis, Wilkinson, Williams's Bon Chrétien, Washington, and twelve others for names; also, fruit of the *Pyrus japonica*. Quinces—Orange, Pear Quince. Melon—Persian Green Flesh. Grapes—Black Hamburg, St. Peters, Red Chasselas, Palestine. Basket of Fruit.

From A. D. Williams & Son, twenty-six varieties of pears, viz. :—Angleterre, Andrews, Beurré d'Amanlis, B. Brown, B. Easter, Begamot, Belle Lucrative, Crassane, Flemish Beauty, Golden Beurré of Bilboa, Harvard, Louise Bonne of Jersey, Messire Jean, Le Curé, Madotte, Napoleon, Passe Colmar, Rousselet de Rheims, Seckel, St. Germain, Doyenné blanc, Summer Thorn, Urbaniste, Verte Longue, Williams's Early. Apples, fourteen varieties, viz. :—Baldwin, Blue Pearmain, Daniel Wise, Fameuse, Gravenstein (two vars.), Golden Pippin, Greening Sweet, Porter, R. I. Greening, Roxbury Russet, Ram's Horn, Russet Sweet, Summer Sweet.

From A. A. Andrews, pears, viz. :—Beurré Diel, B. d'Aremberg, B. d'Amanlis, Bezi de la Motte, Columbia, Colmar d'Aremberg, Fulton, Louise Bonne of Jersey, Passe Colmar, Swan's Egg.

From P. J. Mayer, pears, viz. :—Blue Pearmain, Baldwin, Congress (?) Hubbardston Nonsuch, Mackey Greening, Mackey Sweeting, Porter, Roxbury Russet, R. I. Greening, Trull Sweeting. Pears—Doyenné blanc, Williams's Bon Chrétien. Peaches—three varieties.

Apples—from the farm of Moses Kingsley, Esq., Kalamazoo, Mich., gathered August 28, 1848, viz. :—Baldwin, Bellflower, Gilliflower, Cabushaw, Greening, Jonathan, Nonsuch, Red Winter, Spitzenberg, Seek-no-further, Twenty-ounce Pippin.

From Thomas Dowse, Cambridge, four dishes of Williams's Bon Chrétien, and three of Gansell's Bergamot pears.

From Josiah Gilmore, Newton, apples :—Blue Pearmain, Bellflower, Blush Apple, Egg Apple, Hubbardston Nonsuch, Lady Apple, Roxbury Russet, Spitzenberg. Pears—Flemish Beauty, Seckel.

From John M. Ives, Salem, pears :—Andrews, Bezi de Montigny, Beurré Bosc, Belle Lucrative, Bezi de la Motte, Cushing, Columbia, Flemish Beauty, Fulton, Golden Beurré of Bilboa, Harrison's Fall Baking, Hacon's Incomparable, Jalousie, Long Green, Washington, Winter Nelis, Williams's Bon Chrétien. Apples—a superior late apple from Stratham, N. H. ; a fine tender sweet Essex county variety. Plums—Green Gage, Reine Claude Violet, Red Gage, Sharp's Emperor. Peach—Ives's Early Melacoton.

From Isaac Fay, Cambridgeport, pears :—Beurré de Capiaumont, Chaumontelle, Easter Beurré, Golden Beurré of Bilboa, Louise Bonne of Jersey, Napoleon, Doyenné blanc, Williams's Bon Chrétien, Seckel, and one unnamed. Peaches—Coolidge's Favorite, Jacques, Lemon Rareripe, Owen's Rareripe, Pike's Rareripe, Red and Yellow Rareripe.

From Parsons & Co., Flushing, L. I., apples, thirty-two varieties, viz. :—Autumn Bough, Court of Wyck, Æsopus Spitzenburg, Fallawater, Franklin's Golden Pippin, Fall Harvey, Fameuse, Fall Pippin, Federal Pearmain, Golden Russet, Hertfordshire Pearmain, Hawthornden, Kilham Hill, Long Stem, Michael Henry Pippin, Marigold, Morris Sweeting, Maiden's Blush, Newtown Pippin, Newtown Spitzenberg, Nonsuch, Pennock's, Pickman's Pippin, Rambour d'Ete, Schoonmaker, Tolman's Sweeting, Trimmer's Russet, Vandervere.

From George R. Russell, West Roxbury, grapes :—Black Hamburg, Chasselas of Fontainebleau, Muscat of Alexandria, Royal Muscadine, Red Frontignan, Syrian, Wilmot's Black Hamburg, White Frontignan.

From Thomas Liversidge, Dorchester, Black Hamburg grapes.

From M. H. Ruggles, Fall River, pears :—Duffee, Hull, Philips, Seckel, Wilbur, and Williams's Bon Chrétien.

From George C. Crowninshield, Brookline, Persian Green-flesh melon.

From G. Newhall, pears :—Beurré Bosc, Black Worcester, Cumberland, Catillac, Dix, Frederic of Wurtemberg, Fulton, Louise Bonne of Jersey, Seckel, Urbaniste, Le Curé, and Williams's Bon Chrétien. Peaches—Jacques.

From S. Downer, Jr., pears :—Louise Bonne of Jersey, Golden Beurré of Bilboa, Le Curé, Williams's Bon Chrétien.

From N. Stetson, Bridgewater, grapes, viz. :—Black Hamburg, Chasselas of Fontainebleau, Esperione, Black Hamburg No. 16, Pitmaston White Cluster, Rose Chasselas, Syrian, Wilmot's Black Hamburg.

Pears, viz. :—Williams's Bon Chrétien, Duchesse d'Angouleme, Doyenné blanc, Figue de Naples, St. Ghislain. Peaches—Early Crawford, Stetson's Seedling, Tice's Early, and three varieties names unknown. Plum—Felleberg. Figs—Brunswick.

From A. Clement, Dracut, apples, viz. :—Haskell Sweeting, Kilham Hill, Parker's Sweeting, Porter, Russet Sweeting, R. I. Greening, York Apple.

From John Gordon, Brighton, pears, twenty-three varieties, viz. :—Williams's Bon Chrétien, Buffum, Brown Beurré, B. Rance, Duchesse d'Angouleme, Easter Beurré, Flemish Beauty, Frederic of Wurtemberg, Glout Moreceau, Henry IV., Locke, Louise Bonne of Jersey, Napoleon, Passe Colmar, Queen of the Low Countries, Stevens's Genesee, Doyenné blanc, Seckel, St. Ghislain, Le Curé, Verte Longue, Wilkinson, Winter Nelis. Plums—Coe's Golden Drop. Three watermelons.

From Thomas Needham, Brighton, grapes, fourteen varieties, viz. :—Black Hamburg, St. Peter's, Black Lombardy, Cannon Hall, Chasselas of Fontainebleau, Chasselas Musque, Frankendale, Golden Chasselas, Grizzly Frontignan, Muscat of Alexandria, Palestine, Purple Malvasia, Syrian, White Frontignan.

From Francis Dana, Roxbury, peaches—four seedlings. Quince Apple.

From J. A. Kenrick, apples, viz. :—Baldwin, Cogswell, Hubbardston Nonsuch, Hightop Sweeting, Porter. Pears—Beurré de Capiaumont, Flemish Beauty, Louise Bonne of Jersey, Urbaniste, Le Curé.

From J. S. Sleeper, Roxbury, pears :—Belle et Bonne de Hee, Beurré Diel, Doyenné blanc, Eyewood, Glout Moreceau, Marie Louise, Le Curé, Verte Longue Panache. Apples—Hubbardston Nonsuch.

From Galen Merriam, West Newton, pears :—Beurré Diel, Williams's Bon Chrétien, Bezi de la Motte, Catillac, Duchesse d'Angouleme, Fortunee, Long Green, Martin Sec, Napoleon, Rousselet. Peaches—Crawford's Early, George IV., Lemon Rareri, Morris White.

From Lewis Davenport, Milton, apples :—Baldwin, Golden Russet, Nonsuch, Peck's Pleasant, R. I. Greening, Roxbury Russet. Grapes—Black Hamburg. Peaches—Tippecanoe Cling.

From Dr. Ellwood Harvey, near Chads-Ford, on the Brandywine, Delaware county, Penn., two specimens of Brandywine pears.

From Isaac Jeffries, Chester co., Penn., Seedling Apples, viz. :—two red, called Jeffries, two yellow called Burthingham.

From Dr. Eshelmar, Chester co., Penn., a basket of Red Seedling apples.

From the orchard of Wm. C. Hickman, near Westchester, Chester co., Penn., a basket of peaches.

From B. K. Bliss, Springfield, Mass, very large native grapes.

From John F. Allen, West Cambridge, eight Cantelope melons, very large.

From Mrs. Spaulding, South Reading, Fruit of the Passion Flower. Also, a lemon from a tree fourteen years old, having on it one hundred fine specimens.

From George Walsh, Charlestown, apples, viz. :—Baldwin, Lady, Non-such, Winter Greening, three varieties for name, and three varieties of Crab apples. Pears, viz. :—Brown Beurré, Williams's Bon Chrétien, Doyenné blanc, Winter Nelis, two varieties for name. Grapes—Isabella.

From W. Keith, West Roxbury, apples, viz. :—Highop Sweeting, Pumpkin Sweet, Porter.

From J. Henshaw, Cambridge, pears :—Beurré Diel, Duchesse d'Angouleme.

From J. Balch, Jr., Roxbury, pears, four varieties in a basket.

From S. D. Pardee, Esq., New Haven, Conn., pears :—Howell's Seedling from the original tree, in the garden now owned by Mr. John English.

From John Arnold, Jr., Milton, grapes—Black Hamburg, Zinfundal.

From Mrs. C. Hutchinson, Boston, grapes—Black Malaga, one variety unknown.

From Artemas Rogers, Watertown, Rogers's Purple plums; pot of honey, seven pounds.

From O. Livermore, Brighton, one dozen apples.

From John David De Wolf, Westchester co., N. Y., pears :—Seckel.

From John Albee, Newton Corner, pears :—Duchesse d'Angouleme, Easter Beurré, Napoleon, Williams's Bon Chrétien. Apple—Pumpkin Sweet.

From George Pearce, West Cambridge, pears—Williams's Bon Chrétien, fine. Porter apples, fine.

From Mrs. James Adams, Roxbury, two dozen Seckel pears, weight from three to six ounces each; one dish Chaumontelle.

From Wm. B. Kingsbury, pears, viz. :—Beurré Diel, B. Brown, Catillac, Bell Pear, Doyenné Grey, Black Worcester, Martin Sec, Passe Colmar, two varieties unknown.

From L. R. Mears, Dorchester, Seckel pears.

From John H. Welch, Dorchester, thirteen varieties of pears, viz. :—Beurré Diel, Dix, Duchesse d'Angouleme, Fulton, Frederic of Wurtemberg, Flemish Beauty, Gansell's Bergamot, Rousselet de Rheims, Swan's Egg, Doyenné blanc, St. Ghislain, Urbaniste, Verte Longue Panache.

From Henry Vandine, Cambridge, twenty-nine varieties of pears, viz. :—Andrews, Beurré Spence, (!) B. Diel, Charles of Austria, Flemish Beauty, Frederic of Wurtemberg, Glout Morceau, Golden Beurré of Bilboa, Heathcot, Marie Louise, New Long Panache, Passe Colmar, Prince's St. Germain, Queen of the Low Countries, Doyenné blanc, Seckel, Spanish Bon Chrétien, Turkish Bon Chrétien, Williams's Bon Chrétien, Treasure, Washington, and seven varieties unknown. Plums—Coe's Golden Drop, Hurling's Superb. Seedling nectarine.

From Charles H. Tomlinson, Schenectady, N. Y., Gansell's Bergamot pears.

From Elbridge Tufts, Cambridgeport, apples, viz. :—Baldwin, Blue Pearmain, Cory Greening, English Pearmain, Fall Pippin, Ribstone Pippin, Roxbury Russet, Striped Red Sweeting, Tufts's Seedling, York Russet, kind unknown.

From James Eustis, S. Reading, twenty-five varieties of apples, viz. :—Ben, Burr's, Bough, Harvest, Baldwin, Columbian Pippin, Orange Sweet, Dutch Codlin, Golden Ball, Hubbardston Nonsuch, Jewett's Red, Kilham Hill, Kittredge Sweet, Nonsuch, Porter, Pippin, (?) Roxbury Russet, R. I. Greening, Spice Apple, Sweet Winter Russet, Triangle, Trunnell. Seedling Peach.

From Lewis Wheeler, Cambridgeport, pears :—Dunmore, Williams's Bon Chrétien. Plums—Lombard, White Gage.

From Enoch Bartlett, Roxbury, pears—Frederic of Wurtemberg, Gansell's Bergamot, Heathcot, Verte Longue Panache.

From John A. Hall, Raynham, apples—Baldwin, English Pearmain, Nonsuch, Pumwater, Peck's Pleasant, R. I. Greening, Roxbury Russet, Salmon Sweeting, Tender Sweet, Wing Sweeting.

From James Cruickshank, Waltham, watermelons; Black Spanish Mountain sprout, Long Island, Round.

From Bissell, Hooker & Sloane, Rochester, N. Y. apples, viz. :—Fameuse, Fall Juneating, Hooker, Pomme Gris, Swaar. Pears, viz. :—Swan's Orange, Stevens's Genesee, Doyenné blanc.

From James Munroe, Cambridge, pears—Calebasse, Beurré de Capiaumont, Le Curé, Passe Colmar.

From Messrs. S. & G. Hyde, Newton, apples, forty-six varieties, viz. :—Andover Harvest, Apple from Worcester, Baldwin, Blessing from Vermont, Bonoughson, Bough Harvest, Belleflower, Blue Pearmain, Codlin, Cathead, Detroit, Egg Apple, French Nonpareil, Flanders Pippin, Fuller's Apple, French Pippin, (fall) Green Russet, Gravenstein, Gardener's Sweet, Hubbardston Nonsuch, Long Nonsuch, Newtown Spitzenberg, Newton Pippin, No Core, Old Pearmain, Old Red Nonsuch, Pelham's Sweet, Picena Apple, Philadelphia Pippin, Porter, Pound Royal, Pumpkin Sweet, Pearmain, Roxbury Russet, Ribstone Pippin, Red Crop, Red Sweet, R. I. Greening, Spitzenberg, Seaver's Sweet, Sudbury, Pound, (fall,) Strop Apple, (fall,) Sweet Greening, (fall,) Winter Spice, Yellow Apple, Yellow Crab.

From H. H. Crapo, New Bedford, pears, viz., Ananas, Williams's Bon Chrétien, Beurré d'Anjou, B. de Beaumont, B. de Capiaumont, B. Golden of Bilbao, B. Diel, B. d'Aremberg, Colmar d'Aremberg, Dunmore, Duchesse d'Angouleme, Doyenné Boussock, Fulton, Belle Lucrative, Holland Bergamot, Hacon's Incomparable, Julienne, Jean de Witte, Jalousie de Fontenay Vendee, Louise Bonne of Jersey, Madotte, Napoleon, Passe Colmar, Seckel, Le Curé Verte Longue, and five varieties for name. Apples—Autumn Bough, Twenty-ounce; grown upon the farm of Humphrey Howland, of Scipio, Cayuga county, N. Y.

From J. P. Oliver, Lynn, Oliver's Russet pears, from the original tree.

From H. Snyder, Kinderhook, N. Y., Doyenné blanc pears, and Vandervere apples.

From R. Whittier, Chicopee, pears—Brown Beurré, Bleeker's Meadow, Easter Beurré, Louise Bonne of Jersey, Seckel.

From A. D. Capen, Dorchester, pears—Beurré de Capiaumont, Duchesse

d'Angouleme, Louise Bonne of Jersey, Passe Colmar, Seckel. Apples—Golden Russet, and a variety unknown. Seedling peaches. Melons.

From Charles Sprague, Boston, Spanish filberts, grown in the city of Boston.

From Charles E. Fisk, Natick, Porter apples.

From James Arnold, New Bedford, grapes—Black Hamburg, Chasse-las of Fontainebleau, Royal Muscadine, Royal Muscat(?) St. Peters.

From Geo. Jacques, Worcester, pears—Surpassé Virgoulouse. Peach (?)—11 1-3 inches in circumference; weight, 11 5-8 ounces.

From Dr. W. W. Cutler, South Reading, apples, River (?)

From Samuel Pond, Cambridgeport, pears—Andrews, Beurré Diel, Cushing, Columbia, Doyenné blanc, Dix, Flemish Beauty, Louise Bonne of Jersey, Marie Louise, Napoleon, Seckel, Surpassé Virgoulouse, Urbaniste, Le Curé, Belle Lucrative, Williams's Bon Chrétien.

From Isaac Pullen, Hightstown, N. J., peaches—Crawford's Late.

By Isaac P. Davis, Endicott pears; tree 220 years old.

From G. F. Chandler, Lancaster, apples. (?)

From Wm. Adams, Woburn, a watermelon, weighing 37 1-2 lbs.

From N. N. Dyer, South Abington, apples—Black Detroit, Brown Jacket, Bedford Sweeting, Crow's Egg, Fameuse.

From J. M. Everett, Foxboro', Native grapes, for premium.

Extra fine specimens of Seckel pears, from the New Jersey Horticultural Society, came too late for exhibition.

VEGETABLES.—From J. E. Teschemacher, East Boston, new cabbage, sown 19th of April, in the open ground; only manure one tablespoonful of guano; the finest flavor and most delicate of the cabbage tribe; have been grown to 15 lbs. wt.; introduced and distributed by Mr. Teschemacher, in 1847. Sprouts from the same. New cabbage—Early Northern; seed from St. Petersburg, Russia, received by the kindness of Horatio R. Storer. Sown in the open ground, 19th April; ready for table, 9th July. Sprouts of the same. New string bean; seed from California; sown first week in June; first gathering, first of August. The same plants continue to produce abundantly till the frost; extremely tender; flavor very delicate; grows about three feet high; introduced by Mr. T. White beet root, from which sugar is extracted in France and Germany. Seed from France, 1848. Onions, carrots, Scotch kale exhibited, also to show the action of guano. The onions, &c were raised on a very poor soil, which has had no manure for three successive years, but guano, at the rate of about 400 pounds to the acre.

From James Cruikshank, German Curled greens, or Scotch kale; Scotch Flag leek, Bassano beet, Early Horn carrot, Altringham do., Orange do., Grace Douglass Champion cucumber, new; Latters' Victory of England do.; Lima beans, for table; quantity of do. ripe; Custard Winter, Marrow, and Club squashes. From D. Denny, Dorchester, Drumhead cabbages. From G. C. Crowningshield, by John Quant, celery and egg plants. From Lewis Davenport, a peck of sweet potatoes. From Elbridge Tufts, Cambridgeport, Canada, Crook-neck, and Striped squashes, six

from one seed. From N. Stetson, S. Bridgewater, Giant tomatoes, Club gourd.

From F. W. Macondry, pumpkins, Blood beet, Sugar do.; Marrow, White Crook-neck, and Canada Crook-neck squashes; Royal Cape lettuce, Orange carrot, Large Dutch parsnip, corn, Sugar pumpkin, Drumhead cabbage, Pea beans, Horticultural do., Sieva do., Early China do., Russian bush do., Lima do., cucumber, Seymour celery, three varieties of tomatoes, and thirty-four varieties of potatoes. From S. H. Cole, Chelsea, potatoes, viz.:—Hill's Early, Egg, White Kidney, Knevit's Defiance, Holmes's Early, White Bluenose, Hall's Early, Early June, Wait's Oval, Light Chenango, Chenango, Superior Chenango, do., White Chenango, Carter, Snowball, Victoria, Wait's Round, Kidney, St. Helena, Hancock, Butman, Long White, Wait's Long, Longneck, Apple, Mohawk, or Seals-foot, Black, Peach Blow, Rohan, Calico, Waterloo, Cranberry, Clinton White, American Blues, Prince Edward, Michigan, Connecticut, Orange, Prince Albert, Pinkeye, Parker's Seedling, Stockbridge, Dean, Lady's Finger, and four varieties nameless. Crook-neck squash, Marrow do., Blood beet. From A. D. Williams & Son, pumpkins, Blood beet, carrots, ruta бага, Drumhead cabbage, Savoy do., salsify, Canada squash, Marrow do., celery, Turnip beet, tomatoes, corn.

From G. Pierce, W. Cambridge, Purple broccoli, Giant celery, Red cabbage, White cauliflower, Marrow squashes. From J. Albree, Newton Corner, egg plants. From D. Brims, Roxbury, celery. From A. Mc Lennan, Watertown, egg plants. From Messrs. Hovey & Co., Seals-foot potato, Shepherd's Early do. From A. Bowditch, Savoy cabbage, Northern do., Drumhead do., Sweet corn, Yellow do., gourd. From Benj. V. French, Braintree, Early June potatoes, Hill's Early do., Knevit's Defiance do., Blood beet, Yellow turnip do., Turnip Blood do., Mangel wurtzel, Purple egg plant, White do.; a fine specimen of Egyptian wheat. From Mrs. Spaulding, South Reading, Blood beets. From John Schouler, W. Cambridge, Blood beets. From N. N. Dyer, S. Abington, two Canada Crook-neck squashes, two years old. From Pickering Dodge, Salem, two German cabbages. From Warren's Gardens, Brighton, a bouquet of Egyptian wheat, Snake cucumber, Yard bean. From J. Balch, Jr., Roxbury, tomatoes.

AWARD OF PREMIUMS.

FLOWERS.

Plants in Pots.—To John Cadness, for the best display, of not less than twenty plants, \$12.

To John Quant, for the second best, \$10.

To Messrs. Hovey & Co., for the third best, \$8.

To Messrs. Winship, for the fourth best, \$6.

Vase Bouquets.—To Messrs. Hovey & Co., for the best pair, for the Society's vases, \$10.

To E. A. Story, for the second best, \$6.

To T. B. Cowan, for the best pair, for the Bradlee vases, \$10.

To Hovey & Co., for the second best, \$6.

Parlor Bouquets.—To J. Cadness, for the best pair, \$8.

To J. Nugent, for the second, best, \$6.

To E. A. Story, for the third best, \$5.

Coxcombs.—To J. Nugent, for the best six plants, \$3.

To A. McLennan, for the second best \$2.

Balsams.—To J. Nugent, for the best six plants, \$3.

Gratuities.—To T. Willott, for a fine display of plants, \$10.

To J. Cadness, for a pair of fine bouquets, \$10.

To T. B. Cowan, for a fine specimen of *Araucaria excelsa*, \$3.

To L. Davenport, for a display of roses, \$5.

To Miss H. Barnes, Mrs. J. Mann, M. E. Parker, Miss Russell Mr. J.

Dier, and J. Sheehan, for designs or bouquets, \$5 each.

To Miss H. Barnes, and Mrs E. C. Brown, for designs, \$2 each.

To Miss Mary Kenrick, and Mr. J. Gilmore, \$1 each.

FRUITS.

Apples.—To J. L. L. F. Warren, for the best twelve varieties, twelve specimens each, the Society's plate, \$25.

To Messrs, S. & J. Hyde, for the second best, the Appleton gilt medal, \$10.

To E. Tufts, for the third best, \$5.

Pears.—To S. Walker, for the best twelve varieties, twelve specimens each, the Lyman plate, \$25.

To Messrs. Hovey & Co., for the second best, the Lowell gilt medal, \$10.

To Jos. Lovett, for the third best, \$5.

Grapes.—To G. R. Russell, for the best five varieties, two bunches each, the Lyman plate, \$15.

To J. Needham, for the three best varieties, two bunches each, the Bradlee plate, \$10.

To J. F. Allen, for the best two bunches, two bunches each, \$7.

To N. Stetson, for the best one variety, two bunches, \$5.

Assorted Fruit.—To O. Johnson, for the best basket of various kinds, \$10.

To Hovey & Co., for the second best, \$7.

To A. Bowditch, for the third best, \$5.

To Geo. Pierce, for the best dish of apples, not less than twelve specimens, (Porter,) \$5.

To Jos. Stickney, for the second best dish of apples, (Hubbardston Non-such,) \$5.

To Mrs. Adams, for the best dish of pears, not less than twelve specimens (Seckel,) \$5.

To S. Pond, for the second best dish of pears, (Dix,) \$5.

Gratuities.—To the President of the Society, for an extensive collection of pears, a piece of plate, \$25.

To R. Manning, for an extensive collection of pears, a piece of plate, \$25.

To B. V. French, for a large collection of apples, a piece of plate, \$25.

To Jas. Eustis, for fine specimens of apples, the Society's medal, \$5.

- To Hovey & Co., for the same, \$5.
- To A. D. Williams, & Son, for the same, \$5.
- To A. D. Weld, for the same, \$5.
- To A. Dexter, for the same, \$5.
- To R. Manning, for the same, \$5.
- To A. Hall, for the same, \$5.
- To J. F. Allen, for an extensive collection of grapes, \$15.
- To B. Emerson, for fine specimens of grapes, the Society's medal, \$5.
- To Jas. Arnold, for the same, \$5.
- To O. Johnson, for the same, \$5.
- To J. Gordon. R. Crooker, C. Newhall, A. A. Andrews, E. Bartlett, H. Vandine, and F. W. Macondry, for fine specimens of pears each, \$5.

VEGETABLES.

- To F. W. Macondry, for the best and greatest display, \$10.
- To A. D. Williams, & Son, for the second best, \$6.
- Gratuities.*—To S. W. Cole, for a display of 45 varieties of potatoes, \$10.
- To Geo. Pierce, for fine broccoli, \$5.
- To D. Brims, for celery, \$5.
- To J. E. Teschemacher, for a fine display, \$5.
- To J. Cruikshank, for a fine display, \$3.
- To A. Bowditch, for cabbages, \$2.
- To A. McLennan for egg plants, \$2.
- To E. Cameron, for Drumhead cabbage, \$2.
- To N. Stetson, for giant tomatoes, \$1.
- To B. V. French, for potatoes, \$1.
- To Hovey & Co., for potatoes, \$1.

Sept. 23d.—An adjourned meeting of the Society, was held to-day,—the President in the chair.

Letters were read from Josiah Brad'ee and Samuel Appleton, Esqs. The letter of Mr. Bradlee was accompanied with a donation of \$500. It was voted that this sum be added to his former donation of the same amount, to be invested as a permanent fund for premiums for flowers and fruits. The letter of Mr. Appleton was accompanied with a donation of \$200, to be appropriated to the Library. The thanks of the Society were unanimously voted, for their liberal donations.

The usual thanks of the Society were voted to the various committees, for their labors attendant upon the Annual Exhibition and Festival.

A committee of three was appointed to nominate a list of officers for the ensuing year. J. Lovett, D. Haggerston, and E. M. Richards, were the committee.

Gustin Evarts, and W. P. Gibbs, were elected members of the Society.

Adjourned one week, to Sept. 30th.

October 7th.—The quarterly stated meeting of the Society was held to-day—the President in the chair.

The annual election for the choice of officers for the ensuing year, took place to-day—and the following persons were duly elected.

President—Samuel Walker.

Vice Presidents—B. V. French, Cheever Newhall, E. M. Richards, J. S. Cabot.

Treasurer—F. W. Macondry.

Corresponding Secretary—Eben Wight.

Recording Secretary—E. C. R. Walker.

Professor of Botany and Vegetable Physiology—J. L. Russell, A. M.

Professor of Entomology—T. W. Harris, M. D.

Professor of Horticultural Chemistry—E. N. Horsford.

STANDING COMMITTEES.

On Fruits—F. W. Macondry, Chairman : P. B. Hovey, Jr., J. S. Cabot, Eben Wight, Josiah Lovett, J. Breck, R. Manning.

On Plants and Flowers—David Haggerston, Chairman : A. McLennan, William B. Richards, E. A. Story, J. Cadness, L. Winship, E. C. R. Walker.

On Vegetables—A. D. Williams, Jr., Chairman : W. B. Kingsbury, J. Nugent, A. Bowditch, A. D. Weld, S. W. Cole, George Pierce.

On Library—C. M. Hovey, Chairman : H. W. Dutton, J. Breck, W. B. Richards. R. M. Copeland, Librarian.

On Synonymes of Fruit—M. P. Wilder, Chairman : C. M. Hovey, J. S. Cabot, R. Manning, F. W. Macondry.

Executive Committee—S. Walker, Chairman : F. W. Macondry, M. P. Wilder, E. M. Richards, O. Johnson.

For establishing Premiums—F. W. Macondry, Chairman : D. Haggerston, A. D. Williams, C. M. Hovey, J. Lovett, 2d.

On Finance—M. P. Wilder, Chairman : J. Stickney, O. Johnson.

Of Publication—Eben Wight, Chairman : C. K. Dillaway, J. Lovett, 2d, E. C. R. Walker, F. W. Macondry, D. Haggerston, A. D. Williams, Jr.

Exhibited.—*FLOWERS*: The exhibition of dahlias for premiums took place to-day—after having been postponed from the 23d of September, on account of the annual exhibition and other causes. A hard frost in some locations, and a high wind, had nearly destroyed the blooms in many places, therefore the number of competitors was not very large. The exhibition was held in the committee room, in consequence of the occupation of the hall for other purposes, and it being the day of the annual meeting for the choice of officers, the room was very much crowded, and it was with difficulty the dahlias could be arranged for the judges, for them to decide upon their merits and to make up their awards; this was, however, accomplished, we believe, to the general satisfaction of the exhibitors. All the stands were filled with dahlias, and other flowers, brought in for exhibition, were necessarily excluded—the flowers were generally fine and perfect.

The contributors of dahlias were the President, Hovey & Co., Breck & Co., Winships, Lewis Davenport, H. K. Moore, N. Gale, Parker Barnes, Charles A. Hewins, Nahum Stetson, A. Bowditch, John Quant, James Nugent, and others.

Also roses and bouquets, by various individuals, but for which there was not room to exhibit.

DAHLIAS.—The award of premiums was as follows :—

DIVISION A.

PREMIER PRIZE.—To Messrs. Hovey & Co., for the best twelve dissimilar blooms, the Society's silver medal, \$5 00, as follows:—Miss Vyse, Orlando, Victorine, Viscount Ressegneur, Rose d'Amour, (Brown) Cleopatra, Beeswing, Admiral Stopford, Andromeda, Wizard, and Queen of the French.

SPECIMEN BLOOM.—To Jas. Nugent, \$3 00, for Cleopatra.

SPECIMEN BLOOMS OF VARIOUS COLORS.—*Best Yellow*, H. Moore, \$1 00, for Cleopatra; *Red*, to Hovey & Co., \$1 00, for Beeswing; *Tipped*, to Hovey & Co., \$1, for Miss Vyse; *Lilac*, to P. Barnes, \$1 00, for Queen; *White*, to J. Quant, \$1 00, for Antagonist; *Pink*, to J. Quant, \$1 00, name not known.

DIVISION B.

CLASS I.—To P. Barnes, \$8 00, for the best twenty-four dissimilar blooms, for Victory of Sussex, Pickwick, Emerald, Unique, Duke of York, (Keynes) Duchess of St. Albans, Beeswing, King of the West, Sir Edward Antrobus, Fire King, Cheltenham Queen, Cleopatra, Capt. Warner, Widnall's Queen, Great Western, Great Mogul, Eclipse, Queen of Perfection, Hero of Stonehenge, La Polka, Alba Purpurea grandiflora, Viscount Ressegneur, and two others.

No competition for the 2nd premium.

CLASS II.—No flowers worthy a premium.

CLASS III.—For the best twelve dissimilar blooms, to H. K. Moore, \$5 00, for Cleopatra, Primrose, Sir E. Antrobus, Latour, L'Avergne, Beeswing, Antagonist, Essex Rosy Lilac, Duke of York, Miss Vyse, and three not named.

For the second best, to John Quant, \$3 00. No names of the flowers were received.

GRATUITY.—To the President, of \$5 00, for his fine display of flowers.

FRUIT: From J. F. Allen, Golden Chasselas, Wilmot's Black Hamburgh, and Black Hamburgh grapes; Coe's Golden Drop plums, fine; Seckel pears, very fine. From W. H. Moore, Isabella grapes, large and fine. From J. Lovett, Beurré Diel, McLaughlin, Le Curé, Flemish Beauty, Beurré Bosc, Louise Bonne of Jersey, Paradise d'Automne, Beurré Picquery (!) Madotte, and Colmar, (!) pears, all fine specimens. From W. W. Merrill, Black Hamburgh grapes, open culture. From N. Stetson, Catawba grapes, open culture, and grown under glass, fine; peaches, two sorts unnamed. From H. Vandine, Coe's Golden Drop plums, very fine; Marie Louise pears. From I. Fay, fine Isabella grapes. From Warren's Garden, Flemish Beauty pears, also, Persian Green Flesh melons. From S. E. Coates, Portsmouth, N. H., Duchesse d'Angouleme pears. From A. W. Allen, Portsmouth, Uvedale's St. Germain pears. From A. W. Haven, Portsmouth, one dish unnamed. From O. Johnson, Calebasse Bosc pears (!) From John Frothingham, Montreal, by S. May, St. Lawrence apples.

From J. Newhall, apples, Wine apple, Epps Sweeting. From W. C. Strong, Red Chasselas, Black Hamburgh, Black Muscat, Fontignan, St. Peters, and White Chasselas grapes. From E. Tufts, Cambridge, two varieties of apples, supposed seedlings; both were considered fine and valuable sorts. From S. W. Cole, pears, called the Adams, from Quincy, also a pear (from Watertown,) supposed a seedling from the Doyenné blanc, has the character of a good pear; apples, called Hill's Long stem. From J. S. Cabot, Beurré Moiré; also a variety received from Rivers as the true Beurré Spence.

HORTICULTURAL MEMORANDA

FOR NOVEMBER.

FRUIT DEPARTMENT.

Grape vines in the greenhouse or grapery will now be ready for a final pruning at the gardener's or amateur's leisure. In greenhouses, it is well to prune rather early, so that the plants can be readily arranged without again disturbing them: the leaves are also constantly falling, and this will be prevented if they are pruned. If, however, from any cause, the wood should not fully ripen, as is the case with young vines of the second or third year, it will be well to leave it till fully mature. When they are laid down along the front of the house for the winter, as they always should be, it is an excellent plan to give them a good coating of sulphur and soap, made of about the consistence of good paint, and to be laid on with a brush; this will destroy all insects, and be beneficial to the vines. Vines in cold houses will yet need abundant airing to ripen the wood well. Keep the sashes closed in cool damp weather; but, during fair days, air as freely as possible. Grape vines in the open air may be pruned this month with the best success.

Strawberry beds should be covered, the latter part of this month, with a thin layer of coarse litter, leaves, or manure: as long as the weather is fine, this may be deferred. Ground may now be got ready for planting new beds in the spring.

Currant and gooseberry bushes may yet be safely transplanted.

Raspberry plantations may yet be made with success. The last of the month the shoots should be slightly protected, unless in dry and warm situations, as they are often killed with severe cold. A little coarse manure, scattered over the shoots, or even earth thrown over them, is ample.

Fruit trees of all kinds may be safely transplanted during the whole of November.

Fig trees in the open ground, if well protected, grow freely, and bear abundantly. Plants in pots may be placed in the cellar, or in a warm shed.

FLOWER DEPARTMENT.

Camellias will soon commence flowering, and should be freely syringed in all good weather, in order to keep the foliage clean and handsome. If

any of the pots have not been top-dressed, this should be attended to now. Stake the plants if fine specimens are wanted. Seeds may be sown now.

Hyacinths, tulips, and other hardy bulbs, may be planted as late as the 20th of the month with success.

Pelargoniums may yet be repotted, if this has not been attended to. Water carefully now, as it is best to keep the plants rather too dry than too wet.

Chinese primroses may now be shifted into larger pots, if fine specimens are wanted. Pick off all the flowers which appear now, and it will greatly strengthen the plants for blooming well in February.

Carnations and picotees should be wintered in frames.

Verbenas, raised from cuttings, should now be potted off into small pots.

Schizanthuses should be shifted now into larger pots.

Victoria stocks should now be shifted into the next size pots.

Scarlet geraniums for a spring stock may now be propagated from cuttings.

Oxalis, sparaxis, gladiolus, and other spring flowering bulbs, may now be potted for a succession of bloom.

Leschenaultia formosa should now be carefully watered, and kept as near the glass as convenient.

Callas may now be repotted.

Roses, taken up and potted last month, should now have the shoots headed in to a good bud; the plants may then be removed to the greenhouse, or wintered in frames. Hybrid perpetuals, Bourbons, and some of the Noisettes in the open ground should have a slight covering of coarse litter.

Stephanotus floribundus should now be kept rather dry, and placed in a cool airy situation in order to give it rest.

Gesnera zebrina should now be repotted, and placed in the warmest part of the house.

Petunias should be raised from cuttings for a spring stock.

Nemophila insignis should now be shifted into six inch pots if fine specimens are wanted.

Ericas should now be liberally watered, and placed in a cool airy part of the house.

Cactuses should now be sparingly watered, and kept in a cool part of the house.

Carnations and pinks of what are termed the monthly kinds should now be shifted into larger pots, and they will bloom freely all winter.

Calceolarias should be rather sparingly watered, and placed on a shelf near the glass.

Cinerarias should now be shifted into larger pots.

Rocket Larkspur seed, now sown in beds, will make splendid flowering plants next spring.

Herbaceous plants of all kinds may yet be transplanted.

Hardy flowering shrubs may now be removed with safety.

Greenhouse plants of all kinds which we have not specially noticed, will now need pruning, staking up, and top-dressing, so as to have the houses in good order.

THE MAGAZINE OF HORTICULTURE.

DECEMBER, 1848.

ORIGINAL COMMUNICATIONS.

ART. I. *Notes of a Visit to several Gardens and Nurseries in Western New York.* By the EDITOR.

(Continued from p. 486.)

Garden of H. N. Langworthy.—The garden of Mr. Langworthy is of considerable extent, comprising upwards of thirty acres, and beautifully located, on the east bank of the Genesee River, about two miles from the city. The soil is what would be termed, in New England, a good rich loamy one, but, in New York, where it is generally so heavy and deep, it is called a light sandy one. Mr. Langworthy's principal business is the raising of fruit for the Rochester market, and his grounds are consequently planted for that purpose; being composed of large peach and apple orchards, and two or three acres devoted to the culture of the watermelon, of which he raises large quantities every year.

Mr. Langworthy fully understands the art of market gardening; his grounds are well divided, and neatly kept; and his orchards are specimens of vigorous and healthy growth, producing the most abundant crops. The peach is an especial object of attention, and the crop around Rochester rarely fails. One orchard planted with alternate rows of the Early York and Early Crawford, had this year just begun to bear, producing specimens of the latter, which quickly sold at five dollars per bushel; the Early York is a very early and profitable peach; the trees vigorous, healthy, and abundant bearers: this is the Early York, figured in our *Fruits of America*, with serrate leaves. The ground is manured and ploughed

the first year after the trees are planted; the next year, it is sown to clover, which is turned in as a green crop; this, with a light application of manure, is repeated every year. The trees are thus kept in a vigorous growing condition, and we saw no evidence of a *yellow* peach tree in the whole orchard.

The apple orchards, with one or two exceptions, are cultivated in the same manner, that is, manure and a crop of clover every year: pursuing this system, the trees make an exceedingly vigorous growth, and, when they begin to bear, are loaded with finest specimens of fruit. Mr. Langworthy has introduced into his orchard all the most popular apples, and we here saw the Northern Spy in full bearing—a sight which we had long wished for, and which we were most happy to have so good an opportunity of gratifying. And we need scarcely say that we were most agreeably disappointed. In the place of a tree partially covered with fruit, about four fifths of which, it has been said, was *scrubby and worthless*, for any purposes of sale, we found a tree literally loaded with large and beautiful fruit,—its bright purplish skin covered, like the plum, with a delicate bloom,—not one in ten but what was as fair, or fairer, than any crop of Baldwins we have ever seen, and far superior, in this respect, to either the Rhode Island Greening, or the Roxbury Russet: we were surprised and delighted with the sight. The Northern Spy is a very *upright* grower, making a head as erect as a poplar, though not quite so compact; so erect are the branches, that, no matter how large the crop of fruit, they rarely bend; for, when the branch once begins to bend, it is likely to split off; a tree was pointed out to us, which, last year, produced so great a crop, that a large branch, nearly one quarter of the tree, split off and fell to the ground. How any person, who had seen a healthy tree, could ever have made a statement, that only *fifteen* out of *seventy-five* barrels were fit for market, we have been unable to imagine. We regard it as not only one of the finest varieties we possess, but a vigorous grower, a handsomely headed tree, producing a great crop of large and fair fruit—and decidedly one of the best keeping apples. The appearance of the tree in fruit, is remarkably peculiar and ornamental. The branches being long and upright, the apples are borne on each side of them, in *rows* sometimes *three feet*

long, and so thickly, that they crowd upon each other; in this short space, we counted *sixty* large and beautiful apples. The St. Lawrence, which is highly esteemed by some cultivators, we saw here in bearing, but the season was rather late, and the crop had nearly all been gathered; what few remained were large and handsome; it commands a ready sale in the Rochester Market.

Another tree, to us very interesting, was a Swan's Orange pear. Passing through the orchard, in company with Mr. Bissell, our attention was called to a young tree, perhaps twenty feet high, branched nearly to the ground, and loaded with some of the finest looking pears we ever saw; this was the Swan's Orange,—a tree grafted about twelve years ago, on a sucker *five* feet high, as Mr. Langworthy informed us, and now measuring *seven* inches in diameter at the base, and bearing this year about *three* bushels of pears, all of which were large and fine, varying in weight from *eight* to *twelve* ounces each. We gathered thirty-two of these pears, on a branch not more than *two feet* long. We are thus particular in noting the history of this tree, its product, &c., because we consider it one of the most remarkable American varieties yet produced, and, in our opinion, standing as high, taking all its qualities into consideration, as *any* pear yet known. Our specimens from this tree, which were gathered the 8th of September, were in fine eating order from the 20th of that month to the 10th of October; and specimens gathered later, we ate on the last of October, making its period of maturity about two months. Mr. Langworthy's tree was standing in grass ground, and had no extra cultivation; nearly the whole crop could have been gathered from the ground. It bears *every* year.

We have stated that Mr. Langworthy gives great attention to the culture of the melon. The kinds he cultivates are principally the Imperial and the Black Spanish, but the greatest quantity of the former, which, though so late a variety, that, in the latitude of Boston, it will not come to perfection in the ordinary modes of culture, by Mr. Langworthy's plan, ripens an immense crop. His mode is to start the plants in a hotbed—the same as for cucumbers; the plants are removed to the hills where they are to grow, as soon as the

weather is favorable, but they are not immediately exposed to the weather; boxes, covered with a coarse gauze or millinet, about two feet square, are placed over each hill, and as the plants become inured to the open air, the boxes are removed, and the plants continue to flourish, soon covering the ground. Melons of the Imperial variety are produced, weighing about thirty pounds each. This is a profitable crop, as managed by Mr. Langworthy, and it is almost unnecessary to add, that no crop, either of melons, cucumbers, or squashes, can be grown without a great deal of care, especially in attending to the destruction of insects, &c.

We only regretted that we had not more time to look through Mr. Langworthy's premises more carefully.

Garden of Judge Strong.—The grounds of Judge Strong, situated near the city, though of limited extent, contain a great variety of fine fruit. Eighteen or twenty years ago, the collection of pears here was one of the best in Western New York; but the blight made such havoc among them, that Judge Strong was so completely discouraged in their cultivation, that, for a time, he abandoned them entirely; recently, however, he has again added many of the best kinds to his collection, and among them we noticed some fine trees of the Swan's Orange; as yet, but few of them have attained sufficient age to produce fruit. Among the old trees which escaped the blight, was a Bleeker's Meadow, which here is a very excellent pear, growing to a good size, bearing immense crops, and a few specimens which we brought home ripened off in fine condition. On a light soil and good location, this is a very desirable pear. The Doyenné Blanc, or St. Michael, grows here in the finest possible condition; we saw trees literally breaking down with large and beautiful fruit, without spot or blemish.

The Bough apple grows to great perfection here; Judge Strong gave us a few specimens, from a tree which had been loaded with fruit, and of which, at this late season, (Sept. 8th,) but a dozen or two were remaining upon the tree, which measured four to five inches in diameter. It is a variety which should be in every collection. The garden contains some very old peach trees, now in the most healthy and vigorous order: one was pointed out to us, which was pur-

chased at the nurseries of the Messrs. Prince, of Flushing, L. I., thirty years ago : and those who imagine that the peach can scarcely be preserved in health or vigor, above half a dozen years, should see this tree. By judicious pruning, without which no peach tree can be expected to do well, the peach may be made to attain to a good old age.

The Garden of Mr. Hooker, which adjoins that of Judge Strong, we found a perfect specimen of thorough cultivation. It is principally devoted to the growth of fruit, but, between the trees, marrow squashes, potatoes, and other vegetables, are cultivated to considerable extent. As one item of the product of *two* acres, we may mention the crop of marrow squashes which was disposed of for *five hundred* dollars. Mr. Hooker is more successful in the cultivation of this excellent variety, if we might judge from the crop, than most individuals ; and his success may be, in a great degree, attributed to the destruction of insects ; he informed us that, from the two acres, he had gathered, by measure, more than *one bushel* of squash bugs, that great foe to the growth of the marrow. He manures highly, and the vines grow with the greatest vigor.

The apples which we saw here in considerable quantities were the Fameuse, Swaar, Twenty Ounce, Bellflower, *Æsopus* Spitzenberg, and Hooker, the latter a variety introduced to notice by Mr. Hooker, and but little known ; it is an immense bearer, medium size, very fine, and keeping remarkably well. The Fameuse is a most productive apple—and the fruit always commands a ready sale. Mr. Hooker adopts the plan which we have often noticed, of hanging bottles, filled with molasses and water, among the branches of his trees, especially peaches ; thousands of insects are entrapped and destroyed in this way. Stevens's Genesee pear, a variety which originated in this neighborhood, is a most excellent fruit, deserving extensive cultivation, and we noticed trees that produced beautiful specimens. Swan's Orange, and other fine pears, have been added to the collection, but they were not now in bearing.

The Gardens of Mr. H. Gay, and A. Frost, are remarkable as containing some very large and vigorous trees of the White Doyenné pear, bearing, we should judge, two or three barrels each, of as fine fruit as we ever saw. Three trees of the

Buffum, a variety not properly appreciated, were even more productive than the Doyenné. Naturally upright as the Buffum grows, the crop was so great, that the branches were completely bent down with the weight of the fruit. The trees had been in bearing three or four years, but Mr. Gay did not know the name of the pear. The Early Joe apples, of which there are here some fine trees, were all gathered but a few inferior specimens. In the garden of Mr. Frost, who cultivates the plum in fine condition, we saw a new variety, called the Munroe, of oval form, with a yellow skin; a very excellent kind, and nearly equalling the Green Gage. It has the good quality of hanging a great while upon the tree, shrivelling like a prune. The tree has such an upright and vigorous habit, that Mr. Bissell informed us the plums were purchased for the stones, for the purpose of raising stocks. So abundant is the crop here, that the finest plums bring but a small price; in many gardens, the ordinary kinds are scarcely considered as worth the gathering.

Orchard of Wm. Pitkin.—The largest orchard we visited was that of Mr. Pitkin, situated upon the main street, a short distance from Messrs. Bissell, Hooker & Sloane's. It comprises nearly one hundred acres, embracing all the finest varieties of apples, and in full bearing. The soil is well cultivated, and the trees enriched by green crops of clover, annually ploughed in. The variety includes all the most popular kinds, such as the Spitzenberg, Fameuse, Swaar, Tolman Sweet, Roxbury Russet, Fall Juneating, Hawthornden, &c., &c. The amount of the annual crop we did not learn, as, unfortunately, Mr. Pitkin was absent from home.

Mr. L. B. Langworthy's Garden, about three miles from the city, on the west side of the Genesee River, contains a fine orchard of apples; the Fameuse, as in other places, was loaded with fruit, the branches nearly touching the ground all round: it is naturally a very spreading tree. The Green Sweeting is a fine winter fruit, and a good bearer; the tree is upright, and a vigorous grower. The soil here is a light loam, and the trees have the same excellent cultivation which we have noticed at Mr. Pitkin's.

The Farm and Garden of J. M. Whitney, Esq., is admirably located on the west bank of the Genesee, and comprises

about one hundred acres of level land, well adapted to orchard cultivation. An extensive peach orchard, of several acres, has been set out, as also a large apple orchard, and several pear trees. Mr. Whitney exhibited some magnificent Early Crawford peaches, from his young trees, two years planted, at the last State Fair at Buffalo, which were awarded the highest premium. Mr. Whitney also cultivates a fine collection of phloxes, verbenas, dahlias, and other showy flowers, of which he made a beautiful display among the floral contributions, at Buffalo.

Mount Hope Cemetery.—This fine place, of which we gave a brief account, some years ago, (Vol. VI., p. 91,) is situated to the south of the city, and contains upwards of fifty acres of land. A more picturesque spot could not have been selected. Like Mount Auburn, it embraces every variety of soil and elevation. It has its deep ravines and sequestered valleys, its abrupt declivities and prominent heights; with this advantage over Mount Auburn, that the soil is deeper and richer, and Mount Hope, in the hands of a tasteful planter, may be made one of the most picturesque cemeteries in the country. Naturally, it is not so well wooded as the former place, and the absence of evergreens is immediately noticed; but the soil is capable of bringing trees and shrubs so rapidly forward, that half a dozen years would change the whole aspect of the grounds. The view from the highest point, with Lake Ontario in the distance, is one of exceeding beauty.

(*To be continued.*)

ART. II. *The Pomological Convention, at Buffalo.*

By the EDITOR.

THE Pomological Convention, held at Buffalo, in Sept. last, of which we now have the published report before us, was the first of its kind in this country, and, we believe, the first ever held. We have reference now to a general convention; for, it is well known, that a State meeting of Pomologists and Fruit Cultivators was convened at Columbus, Ohio, last year,

to discuss subjects connected with the culture of fruits,—to bring into notice new varieties of merit,—and to clear up the existing confusion in nomenclature.

The Buffalo Convention was a national one. It was projected by the New York State Agricultural Society, in connection with the Buffalo Horticultural Society, and invitations were sent out early last spring, to the Horticultural Societies of the country, to appoint delegates to the convention. The object was one of general interest, and the assemblage of so many cultivators and pomologists from various states in the Union, must have been highly gratifying to the State Society. No less than *fourteen* states, besides the Canadas, were represented, and the number of delegates which were present, was between seventy and eighty. Fifteen or sixteen different Horticultural Societies or Associations were represented.

Owing to circumstances beyond our control, we unfortunately, and to our great regret, was not able to reach Buffalo, until the morning after the convention adjourned; but as we have a full report now, we are enabled to give a complete abstract of all that was accomplished during an interesting session of three days.

Of the utility of such conventions as this, no one can have a doubt; yet we apprehend that greater results will be expected than can be realized. The simple fact, that a hundred cultivators come together from various parts of the country, all deeply interested in the subject of pomology, and interchange sentiments upon this engrossing science, is, in itself, a result of no small importance. It must not be expected, that, in the short space of *three days*, with hundreds of varieties of fruits before the members, they are to test every one of them, and decide upon their merits or demerits. It would be impossible to do so. This is a labor of years, and not of days; yet, if a beginning is made, much will be accomplished every season, and, in a few years, a large amount of information will be collected together, of the greatest value to fruit cultivators, throughout the country. But we have little space now for further remarks, and proceed to notice the report.

The discussion of fruits was commenced, and that first taken up was:—

PLUMS.

Washington.—Pronounced first-rate, taking all its qualities into consideration. Some cultivators stated that it was liable to rot: but all agreed as to its size, beauty, &c.

Purple Favorite.—Recommended as a plum of the first quality considered by some equal to the Green Gage.

Red Gage.—Recommended as first-rate.

Imperial Gage.—Unanimously recommended as one of the best plums, and particularly worthy of cultivation.

Diapree Rouge.—Recommended as first quality.

Green Gage.—Recommended as a first-rate plum in every particular. Mr. Prince stated that it was an "unthrifty grower."

Coe's Golden Drop.—First-rate, of the highest excellence when fully ripened.

Jefferson.—Recommended as first-rate, and the trees of vigorous growth. [Not when young.—*Ed.*] Mr. Thomas did not consider it equal to the Green Gage. But few of the members appeared to be acquainted with it.

Bleeker's Gage.—Recommended as first-rate.

These were all strictly *first-rate*.

Diamond.—Third-rate in flavor, but a large and productive variety.

Lombard.—Second-rate in quality; but large, handsome, and a sure bearer.

La Royale.—Recommended as nearly first-rate.

White Magnum Bonum.—A first-rate kitchen fruit, but third-rate for the table.

Large Yellow.—From Ohio. Pronounced third-rate, and unworthy of cultivation.

PEACHES.

Coolidge's Favorite.—Recommended as a high-flavored and juicy peach, large-sized, and first-rate in quality.

Haines's Early Red.—Recommended as first-rate: but believed to be, by many of the members, identical with the Large Early York, of New Jersey.

Early Malden.—A new variety, recommended as first-rate. The specimens by Mr. Dougal, of C. W. It is of good size, and ripens early, about the time of the Early York. Leaves serrated, without glands; tree, vigorous and healthy.

White Imperial.—Pronounced a peach of first-rate quality, and worthy of cultivation. Originated by David Thomas, Esq.

Large Early York.—A first-rate large early peach, and worthy of general cultivation. Mr. Prince believed that this was the same as the Geo. IV., and perhaps the Old Rareripec.

Old Mixton Free.—Unanimously recommended as a superb peach, and well worthy of general cultivation.

These were all strictly *first-rate*.

Early Crawford.—Very beautiful in appearance, but second-rate in quality. Considered, by all the members, a most valuable *market* peach.

Jacques.—Recommended as large and productive, but not first quality in flavor.

Early Barnard.—Known, in Western New York, as the Yellow Alberge, or Yellow Rarripe; evidently a misnomer. A hardy and good peach, not first-rate. Voted, that in future, it be called the Early Barnard.

Snow.—Considered by all as excellent for preserving, as a first-rate peach by some, and unworthy of cultivation, by others.

Blood Cling.—Voted unworthy of cultivation.

Early Royal George.—Second-rate; liable to mildew, and, on that account, hardly worthy of cultivation.

Yellow Melacoton.—Considered unworthy of cultivation.

PEARS.

Tyson.—Pronounced among the first of summer pears. Mr. J. J. Thomas said it was much larger than Dearborn's Seedling.

Golden Beurré of Bilboa.—Pronounced first-rate, and having the reputation of growing upon the quince or pear.

Williams's Bon Chrétien or Bartlett.—Agreed to be an excellent fruit, in every particular, and well worthy of general cultivation.

Dearborn's Seedling.—A first-rate pear, and worthy of extensive cultivation. Often bears to excess, and does well on the quince.

Bloodgood.—Pronounced to be one of the best summer pears. Mr. J. J. Thomas said that, in heavy soils, it was worthless: and Mr. Prince said it was always first-rate.

Marie Louise.—A first-rate pear, though the vote was not unanimous. Mr. Thomas thought it only second-rate. Mr. L. F. Allen stated, that, in his stiff clay soil, it was always fine.

Stevens's Genesee.—Pronounced to be among the first-rate pears. Some thought it more liable to blight than others: all pronounced it very productive.

White Doyenné.—In Western New York, a first-rate pear.

Rostiezer.—Pronounced to be among the best of the summer pears.

Louise Bonne of Jersey.—Pronounced a valuable pear, and worthy of general cultivation.

Glout Morceau.—Recommended as a first-rate fruit, and worthy of cultivation, either on the pear or quince.

These were all *first-rate* pears.

Washington.—Worthy of cultivation in large gardens, but not first-rate.

Julienne.—Unworthy of cultivation.

Honey, of Ohio.—Specimens poor, and passed by.

Orange Bergamot.—Unworthy of cultivation.

Brown Beurré.—Pronounced unworthy of cultivation, chiefly for the reason that fine specimens could not be produced, without great care.

English Autumn Bergamot.—Pronounced unworthy of cultivation.

Beurré d'Amanlis.—Second-rate in flavor, but valuable for orchard cultivation, on account of its great productiveness.

Andrews.—Decided nearly first-rate, but not unanimously.

Cushing.—Pronounced to be second-rate.

Bezi de la Motte.—On account of its frequent worthlessness, considered unworthy of cultivation.

Heathcot and Foster's St. Michael.—No action had on these two sorts.

Swan's Orange.—The name of this pear was discussed, but no vote taken on its merits. [It rather surprised us to hear gentlemen urge that it should not be called Orange, as it was a yellow pear: if this argument is to hold good, then *White Doyenné* should be altered to *Yellow Doyenné*; for we never saw that pear with a white skin.—*Ed.*]

Cabot.—Pronounced second-rate.

APPLES.

Early Harvest.—Decided to be worthy of general cultivation. Considerable discussion arose relative to its name. Mr. Thomas proposed to rename it the Yellow Harvest, and it was decided to alter the name. This vote certainly must have been without the least reflection. If pomological conventions are to change names of years' standing in this way, why, our nomenclature would be "confusion worse confounded."

St. Lawrence.—Voted, but not unanimously, to be first-rate. Mr. Thomas said that, at Macedon, N. Y., it was called *third-rate*. Around Rochester, Mr. Barry said it was called *first-rate*.

Dyer, or Pomme Royal.—Considered a first-rate fruit. In some places in New York, it is known as Coe's Spice, and, in others, as the Hollow Crown.

Early Joe.—Unanimously passed as a first-rate apple. Mr. Bissell said that it had been pronounced, by those who had eaten it from the tree, to be about the best eating apple they had ever known. It does not bear transportation well. It should be eaten directly from the tree. It is also a fine pie apple.

Early Strawberry.—Considered a first-rate apple for the season.

Bough, or Sweet Bough, as generally called. Unanimously voted a first-rate apple for the season.

Sine Qua Non.—Unanimously considered a first-rate fruit.

Summer Rose.—Unanimously passed as a first-rate fruit. Considered by some as the best early apple.

Fameuse.—A first-rate table fruit for the season, especially for northern regions.

R. I. Greening.—Considered a first-rate standard fruit, both for the table and for cooking.

Newtown Pippin.—Unanimously passed as a fruit of first-rate quality. A variety of opinions were expressed relative to this apple. In western New York, in some localities, it was stated to be worthless, while, in others, no apple could equal it.

Lowell Apple.—A first-rate fruit. It is known, in western New York, as the Orange, Queen, Favorite, Risley, Ox, Greasy Pippin, Greasy, Tallow, and Tallow Pippin, and, at Cleaveland, as the Queen Anne. Some members did not consider it first-rate, but it was acknowledged to be fair and large size, and the tree very productive.

Westfield Seek-no-Further.—Unanimously passed as a first-rate fruit.

Northern Spy.—Unanimously considered first-rate. Much discussion arose respecting this apple; and a motion was made to reconsider the vote. The statement, made by J. J. Thomas, that "out of ninety barrels, only seventeen were found fit for market," was shown to be entirely without the shadow of foundation. On the contrary, Col. Hodge, of Buffalo, stated, that the fruit was *uniformly as fair* as the Spitzenberg, and we can confirm this, after having recently examined some of the trees in bearing, in Rochester, of which some account is given in a previous page. Mr. Bissell stated, that the trees in Rochester were breaking down with fruit! After reading all that has been said for and against the Spy, we are inclined to believe the attempt to injure the reputation of the apple was made from a mercenary motive:—those who cried it down had no trees for sale. It was clearly proved to be not only a great bearer, but the fruit very large, fair, and handsome. The tree is naturally a very upright grower, and it is, therefore, necessary, as every skilful cultivator knows, to keep the head *well pruned*, in order to open the centre to the sun's rays.

Gravenstein.—Unanimously passed as first-rate for the season.

Æsopus Spitzenberg.—Considered first-rate.

Fall Pippin.—Unanimously passed as first-rate in every respect.

Late Strawberry.—Pronounced of first-rate quality in every respect. It is twice as large as the Early Strawberry, superior in quality, and three weeks later.

Swaar.—Unanimously voted first-rate in all respects.

Belmont.—Unanimously passed as first-rate. In Michigan, it is the most popular apple. There is a doubt about its being synonymous with the Waxen, or Gate, as it is often called.

Mother.—Pronounced first-rate. This opinion, which is quite correct, could not have been formed from a trial of the fruit, as it is yet scarcely known out of the locality of Middlesex county in Massachusetts.

Jonathan.—Considered as first-rate, taking all its qualities into consideration.

Porter.—Unanimously judged as first-rate.

Rambo.—First-rate wherever cultivated.

Vandervere.—Unanimously passed as first-rate.

Hubbardston Nonsuch.—Considered first-rate in every particular.

Pomme Gris.—Unanimously passed as first-rate in "this section of the Union and Canada." Nothing was said against it.

Bullock's Pippin, or Sheepnose. Recommended as worthy of general cultivation. The American Golden Russet, of Downing, is a synonyme of this.

American Summer Pearmain.—Unanimously passed as first-rate in all respects.

Hagloe.—Considered a first-rate apple. Coxe erroneously called it the Hagloe Crab, a well-known cider apple in England.

Jersey Sweet.—Unanimously passed as a first-rate fruit, and worthy of general cultivation.

Baldwin.—Considered first-rate in New York and New England, but does not succeed well in Ohio.

These were all *first-rate* apples.

Tart Bough.—Considered only second-rate in value from its lateness. This has been called a synonyme of the Early Harvest by some authors, but it is a distinct fruit, three weeks later than the Harvest.

Indian Rareripec.—First-rate for cooking, and second-rate for the table.

Minister.—Second-rate.

Summer Queen.—First-rate for cooking, and second-rate for the table.

Duchess of Oldenburgh.—Considered second-rate for the table, and first-rate for cooking.

Red Astrachan.—No decision upon its merits. It was stated that it would sell better in the market than any other apple of its season. Purchasers are generally very good judges of what they want. Williams's Bon Chrétien, or Bartlett pear, is not a first-rate fruit, yet to throw it aside on this account, when it brings the high price of 50 cents to \$2 per dozen, would be considered most unwise. The Red Astrachan, on account of its *beauty, earliness, and abundant product, the fine form of the tree, and its attractiveness when loaded with apples, as well as its excellence as a kitchen fruit,* merits a place in the most select collections. It is such decisions as this which destroy all confidence in the doings of a convention.

Yellow Newtown Pippin.—No decision upon its merits.

English Russet (of Downing.)—A first-rate keeper, but second-rate for the table. The name is doubtful. It is known, in western New York, as the *Poughkeepsie Russet*, a name which the convention adopted. The specimens presented were of the growth of 1847, and were "quite fresh, sound, and agreeable."

Ribstone Pippin.—Considered third-rate in New York, and second-rate farther north. Gentlemen from Canada stated that it was as good there as it was in England.

Twenty Ounce.—Considered first-rate in size, beauty, and productiveness, and second-rate in quality.

Beauty of the West.—Third-rate.

Hawthornden.—Unworthy of cultivation.

Red and Green Sweeting.—Considered third-rate, but not unanimously.

Gloria Mundi.—Unworthy of cultivation.

Cornish Gilliflower.—Unworthy of cultivation.

King of the Pippins.—Considered second-rate.

APRICOTS.

Moor Park.—Decided to be of first-rate quality, and worthy of general cultivation. This was the only kind presented.

NECTARINES.

Early Violet.—Unanimously considered first-rate. The specimens were from Canada.

Downton.—Unanimously voted to be first-rate.

This long catalogue of fruit was discussed during the three days' session, and we believe the results arrived at will be far more valuable to the public than the merely bringing forward a *select list* of kinds, nearly all of which our respectable nursery catalogues have, *years ago*, designated as *unexceptionable fruits*, worthy a place in every garden.

ART. III. *Reasons for and against Root-Grafting.* By N. GOODSSELL, Esq.

AT this time, when there is so much interest manifested in the cultivation of choice fruits, permit me to make a few remarks, with regard to the effects produced by the different methods of cultivation, and the mutual effect between the stock and scion, confining my observations to apples and pears.

The more common method of propagation, which has been pursued for the last twenty-five years, in the northern and western states, has been by what is termed "root-grafting," which has its advantages, and disadvantages, a few of which I will endeavor to point out.

Its principal *advantage* is to the nurseryman, in economizing labor; as, by this method, grafting may be performed during the last of winter, or early in spring, when the weather would not permit laboring out of doors, and this can be done within; and grafts set in February or March, when packed in earth, and kept in a cool place, take equally as well as when set in the month of May, when business is urgent, and the price of labor high.

The common process is, to take up the young seedlings to be used as stocks, in the fall, and place them where they can be got at conveniently, during the last of winter, or early spring. When these are wanted for use, they are taken up, and the roots washed, and such as are of sufficient size, cut into lengths of four or five inches, according to the views of the operator. The scions are then cut into similar lengths, when they are put together by that method, known as "whip and tongue grafting," after which, some wind the place of junction with tow, or other substance; others set them in the earth without, where they remain until the season is so far advanced, as to allow their being planted into nursery rows.

The *disadvantages* of this mode of propagation, fall mostly upon the orchardist, as such trees do not flourish when they become old, as well as those cultivated upon their natural roots, such as are formed when seedlings are taken from their seed beds, their tap roots shortened and planted in nursery rows, until they become well established. After which, they may be budded, or grafted near the surface of the ground, or they may be allowed to gain sufficient height to be grafted a few inches below where the top is to be formed. I am in favor of this latter method, for the following reasons:—

First, whatever obstructs the descending sap of a fruit tree, so long as the internal part favors the ascension, increases the size, and, generally, the quality of the fruit, and hastens its maturity. It is in conformity to this principle, that ringing the bark, and twisting wires tight round branches, so as to impede the descending sap, is resorted to, by those who wish to produce large specimens, of early maturity. The same object is obtained by inserting scions in stocks of the same *genera*, the growth of which is so dissimilar, as to prevent that perfect union, which would take place, were they inserted in a stock of its own *species*. Examples:—the pear upon the quince, thorn, and apple, often produces fruit of double the size produced upon their own stocks, however thrifty. This increase of size is often varied, in proportion as the obstruction is a greater or less distance from the point.

These general principles are applicable to apples cultivated upon their own stocks, and it will be found, where there is the greatest dissimilarity of growth, between the stock and

scion, and the nearer the cicatrice, or place of union, is to the fruit, the larger will be the size, other circumstances equal.

Rochester, Nov. 12th, 1848.

ART. IV. *Descriptions and Engravings of Select Varieties of Apples.* By the EDITOR.

XXII. BLUE PEARMAIN. *American Orchardist.*

AMONG the few varieties of apples which are generally cultivated in Massachusetts, the Blue Pearmain (*fig. 49.*) holds a prominent place. It is much inquired for in the market, and always commands a good price: its rich purplish crim-

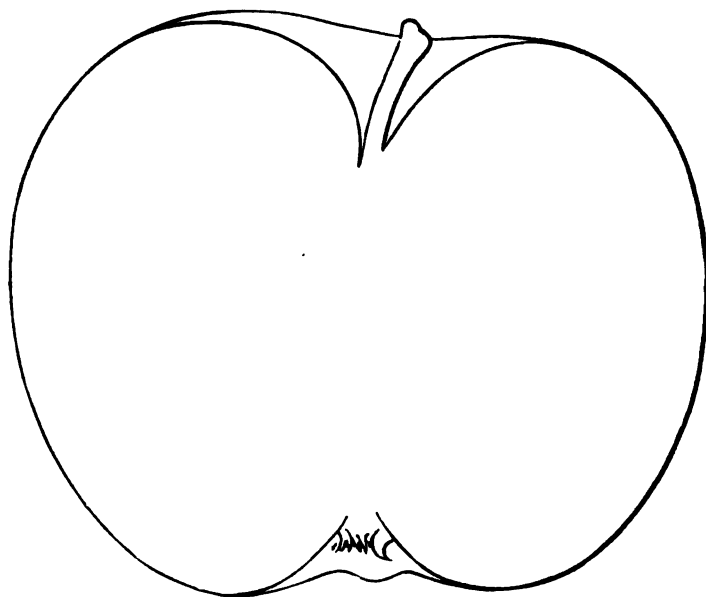


Fig. 49. Blue Pearmain Apple.

son skin, covered with a dense bluish bloom, from whence its name, its high and peculiar flavor, as well as its general good qualities of size, productiveness, &c., have rendered it a favorite with all lovers of good apples. The history of its

origin is unknown ; but it is believed to have originated in Middlesex county, where it is more extensively cultivated than any other part of the State. The trees have a healthy and vigorous growth, with deep reddish wood.

Size, large, about three and a half inches broad, and three deep: *Form*, roundish, regular, flattened at each end, and narrowing a little to the crown: *Skin*, fair, smooth, having a dull yellow ground, but nearly or quite covered with dull red, distinctly striped and splashed with dark dull crimson, rather thickly covered with large pale russet specks, with streaks of russet around the stem, and the whole surface overspread with a dense bluish bloom: *Stem*, short, about half an inch long, rather stout, curved, and inserted in a rather broad and deep cavity: *Eye*, medium size, partially closed, and moderately depressed in an open, and slightly furrowed basin ; segments of the calyx short: *Flesh*, yellow, fine, and rather firm ; *Juice*, tolerably abundant, pleasantly acid, rich, high-flavored, and excellent: *Core*, large, rather open: *Seeds*, small, pale brown. Ripe from October to January.

XXIII. HUBBARDSTON NONSUCH. *American Orchardist.*

The Hubbardston Nonsuch (*fig. 50.*) has acquired a reputation as one of the very best of apples. Of large size, beautiful appearance, and regular form, with a yellow and tender flesh, and rich flavor, it must claim a prominent place among the finest of our autumn apples. We say autumn, because most writers have placed it among the winter varieties, where it does not belong,—not even among *early* winter apples. We have never eaten a single specimen which had not lost most of its juiciness by the last of November ; and, on inquiry in the market, we learn that it is rarely to be found after the middle of that month. Its period of maturity is during the months of October and November, after which it becomes a mealy and indifferent fruit.

The Hubbardston Nonsuch originated in the town of Hubbardston, Mass., and is cultivated to considerable extent in the eastern portion of the State, finding a ready sale in Boston market, where it is in much request. The tree is a mod-

erately vigorous and upright grower, and bears abundant crops every other year.

Size, large, about three and a quarter inches broad, and three deep: *Form*, roundish, or roundish conical, largest near the middle, narrowing towards the crown, and slightly to the stem: *Skin*, fair, smooth, glossy, of a rich yellow, nearly covered with deep orange red, rather indistinctly striped with light crimson, often russeted around the stem, and sparsely

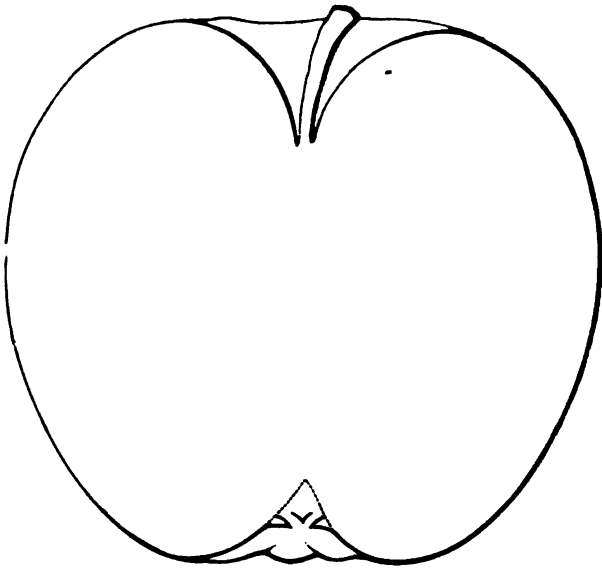


Fig. 50. Hubbardston Nonsuch Apple.

dotted on the surface with large russet specks: *Stem*, medium length, about three quarters of an inch long, rather slender, and moderately inserted in a broad, regular cavity: *Eye*, large, partially open, and little sunk in a broad, open, and ribbed basin; segments of the calyx broad and very short: *Flesh*, yellowish, rather fine, crisp, and tender: *Juice*, tolerably abundant, with a rich admixture of sweet and acid, high-flavored and excellent: *Core*, small, nearly close: *Seeds*, medium size, plump. Ripe in October and November.

XXIV. LORING SWEETING. *Thatcher's American Orchardist.*

In the vicinity of Plymouth, an apple under the name of Loring Sweeting, (*fig. 51.*) is considerably cultivated, and highly esteemed as one of the very best winter sweet apples. No author mentions it but Dr. Thatcher; he states that it was "brought from the county of Bristol by Mr. E. Loring, of Plympton, Plymouth county, and is much cultivated in this vicinity; its origin, or the name by which it is distinguished in other parts of the country, I have not been able to ascertain." Several of our friends have sent us specimens the last three or four years, but none of them so fine as some

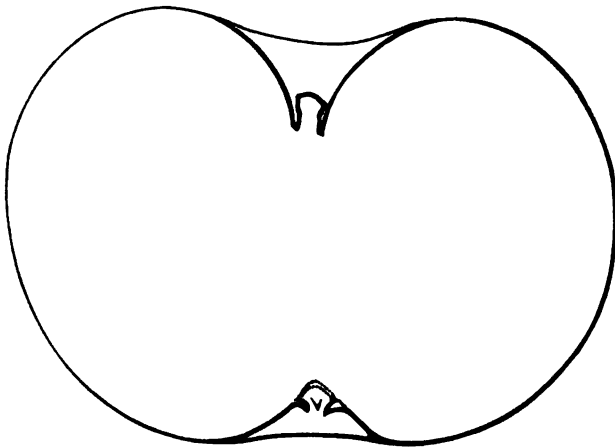


Fig. 51. Loring Sweet Apple.

we have had the present season from the Rev. A. R. Pope, of Kingston, from one of which our drawing, as well as our description, has been made.

Size, medium, about three and a quarter inches broad, and two and a quarter deep: *Form*, oblate, regular, largest in the middle: *Skin*, fair, smooth, pale yellow, or greenish yellow, broadly tinged with pale red, and more or less spotted with large brownish specks: *Stem*, very short, about a quarter of an inch long, thick, and deeply inserted in a large, open, regular cavity: *Eye*, medium size, closed, and little depressed in a small, round, shallow basin; segments of the calyx short:

Flesh, yellowish white, fine, crisp, and very tender : *Juice*, abundant, rich, sweet, and high-flavored : *Core*, small, somewhat open : *Seeds*, medium size, broad, and plump. Ripe from November to January.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Foreign Notices.*

ENGLAND.

Dahlias and Dahlia Exhibitions of 1848.—The close of the season reminds us of our usual summary of information upon the dahlia, which will guide amateurs in their selections of varieties for the coming year. According to the reports of the exhibitions in the English gardening papers, the season for the dahlia has been favorable, and the display beautiful beyond any preceding year. Much more interest has been taken in the culture of this splendid flower, and, as the prizes have been liberal, the competitors have been numerous, and the specimens remarkably perfect. We proceed to give the names of the winning flowers, at the most prominent exhibitions near London :—

ROYAL HORTICULTURAL FETE AT SALISBURY.—Best twenty-four blooms. Yellow Standard, Nonpareil, Beeswing, Marquis of Worcester, Lillywhite, Aurantia, Optimus, Boule de Feu, Queen, Dr. Graham, Dazzle, Shylock, Essex Triumph, Marchioness of Cornwallis, Walter Hilson, Princess Radzville, Admiral Stopford, Gloria Mundi, Marquis of Aylesbury, Standard of Perfection, Capt. Warner, Queen of England, and Mrs. Anderson,—to Mr. Keynes, Salisbury.

ROYAL SOUTH LONDON FLORICULTURAL SOCIETY.—Best twenty-four blooms. Beeswing, Golden Fleece, Captivation, Miss Vyse, Sir R. Peel, Privateer, Box, Minn, Nonpareil, Essex Triumph, Yellow Standard, Richard Cobden, Toison d'Or, Louis Philippe, Conspicua, Berryer, Mrs. Anderson, Andromeda, Capt. Warner, Princess Radzville, Queen of Roses, Black Prince, Shylock, and Gem,—to Mr. Turner, of Chalvey.

NORWOOD FLORICULTURAL SOCIETY.—Best twenty-four blooms. Marquis of Ailsa, Venusta, Goliah, Vivid, Mary Anne, Erecta, Ariel, Toison d'Or, Queen, Lady Leicester, Walter Hilson, Victor, Prometheus, Mont Blanc, Caractacus, Cleopatra, Miss Vyse, Crocus, Essex Triumph, Gem, Lady of the Lake, Gloria Mundi, Princess Radzville, and Cardinal,—to Mr. Gaines of Battersea.

NORTH LONDON FLORICULTURAL SOCIETY.—Best twenty-four blooms. Toison d'Or, Mrs. Shelly, Lady of the Lake, Beeswing, Andromeda, Athlete, Dr. Graham, Scarlet Unique, Yellow Standard, Golden Fleece, Standard of Perfection, Nonpareil, Sylva, Aurantia, Marquis of Aylesbury, Miss Vyse, Gloria Mundi, Shylock, Minn, Box, Marchioness of Cornwallis, Scarlet Gem, and Capt. Warner,—to Mr. Argent, Stoke Newington.

ROSHERVILLE GARDENS, FLORICULTURAL EXHIBITION.—Best twenty-four blooms. Emperor, Prince de Joinville, Marquis of Aylesbury, Queen, Horatio, Competitor, Toison d'Or, Beeswing, Mrs. Anderson, Capt. Warner, Antagonist, Essex Triumph, Boule de Feu, Louis Philippe, Yellow Standard, Miss Weller, Shylock, Braggs Star, Nonpareil, Madam Wachy, Delight, Scarlet Gem, Marquis of Worcester, and Seedling,—to Mr. Bragg, of Slough.

Fancy Dahlias.—The most successful varieties are as follows:—

Madame Wachy, Hermione, Emperor of Morocco, Bouquet de Bruil, Judy, Roi de Pontelles, Miss Coverly, Surprise, Rembrandt, Robin Hood, Jenny Lind, Viscount Resegneur, Master G. Clayton, Triomphe de Magdeburg, Picotee, Dulcinea, Adolph Dubras, Mrs. Shaw Lefevre, Mimosa, and Harlequin. These are *twenty* of the most popular kinds.

Seedlings of 1848.—Owing to many liberal prizes offered by seedsmen and cultivators of dahlias, for seedlings, many new varieties have been exhibited. But the following appear to be the most prominent sorts:—Purple Standard, a superior flower, purple crimson; Mr. Seldon, (Turner's,) a good flower, like Marquis of Aylesbury; Grenadier, (Turner's,) a bold claret flower; General Cavaignac, (Hunt's,) one of the best of the fancy dahlias of the season, exhibited every where with success; Miss Blackmore, (Keynes'), a fancy flower, of great beauty; Lorraine, (Smith's,) a fine fancy flower; Miss Blackburne, (Dodd's,) a beautiful fancy flower; Nymph, (Steins,) color a blush rose, of the faintest tint, deepening to the tip, which is blotched with cherry color; General Vyse, a crimson maroon flower, very fine; Othello, (Braggs'), a fine flower, of a dense blackish maroon color; Rainbow, (Keynes') a magnificent fancy flower; Sunbeam, (Keynes'), another fine fancy flower; Earl of Clarendon, (Long's,) a brilliant yellow flower. These all received *first class* certificates, three blooms, in all cases, having been exhibited.

From this abstract of the dahlia reports of the year, our amateur friends can make up their minds, in regard to the sorts they would like to add to their collections, the coming spring.—*Ed.*

ART. II. Domestic Notices.

Pomological Convention, at Buffalo.—In a previous page, we have given the results of the doings of this convention, and have no doubt they will be attentively read by every cultivator. Not having before given the names of the officers of the convention, we add them here:—

President.—David Thomas, Cayuga Co., New York.

Vice Presidents.—W. R. Coppock, N. Y.; Henry H. Coit, Ohio; J. W. Hayes, N. J.; J. D. G. Nelson, Ind.; A. T. Prouty, Michigan; Dr. J. A. Kinnicut, Ill.; S. P. Beecher, Wisconsin; T. Allen, Mo.; Dr. C. Beadle, C. W.; W. J. Hayes, C. E.

Secretaries.—Dr. Herman Wendell, Albany, N. Y., and W. R. Prince, Flushing, L. I., N. Y.

Fruit Committee.—B. Hodge, Buffalo; F. R. Elliott, Cleaveland, O.; C. Downing, Newburg, N. Y.; T. Hancock, Burlington, N. J.; P. Barry, Rochester, N. Y.; J. J. Thomas, Macedon, N. Y.; Chas. Tainter, Buffalo, N. Y.

Messrs. J. D. G. Nelson, Ind.; James Dougal, C. W.; F. R. Elliot, Ohio; Dr. J. C. Holmes, Mich.; Dr. H. Wendell, Albany; L. F. Allen, N. Goodsell, N. Y., appointed a committee of seven, to take into consideration the propriety of holding future Pomological Conventions, reported as follows:—

“That hereafter an annual assemblage, or convention, shall be held under the name of North American Pomological Convention.

“*Resolved*, That this convention shall be held in the coming year of 1849, in the town or city in which the New York State Agricultural Fair may be held,—to convene its session the first day succeeding the closing of the fair—and that the recording secretary of the New York State Agricultural Society, shall be entrusted with the charge, and respectfully solicited to give due notice of the meeting, by means of Agricultural Journals, and cards of invitation to gentlemen pomologists, and Horticultural Societies, throughout the Union, and the Canadas, that they may send delegates, or attend and bring or send specimens of fruits for exhibition.” After passing votes of thanks to the officers of the N. Y. State Society, and the Buffalo Horticultural Society, the convention adjourned.—*Ed.*

Pears on North Walls.—A neighbor of mine wishes to know what kind of pear trees will be best to train against the north side of a high stone wall running east and west. Will some of your correspondents inform him and also whether trees in such positions are productive. Position on seacoast, latitude 41 degrees 35 minutes.—*A Horticulturist.*

[We should be glad to hear from any of our correspondents who have had experience, upon the growth of pears on north walls. We should suppose the best kinds for the purpose would be the Dearborn's Seedling, Dunmore, Belle Lucrative, Beurré de Capiaumont, Glout Morceau, Urbaniste, Williams's Bon Chrétien, Lewis, and Beurré d'Amanlis.

These are all *very hardy*, and sure bearers, and would probably do as well in such a situation as named, as any others which could be selected.—*Ed.*]

Summer Pruning Pear Trees.—I have about six hundred dwarf pear trees set last spring, upon which I have practised summer pruning nearly in the same manner recommended by you, though sometimes in great doubt. When stopped, they would push again in several of the upper buds, and if these were rubbed off, they would start again and again, and I have almost come to the conclusion that this constant war upon the tendency to grow must injure the tree. On the other hand, if the trees are not allowed to grow, they can hardly blight, though that must be tested by experience. One thing is certain, my trees are finely set with fruit buds for next year. Can this system be pursued year after year without destroying the tree?—*Truly, J. W. Bissell, Rochester, N. Y., 11th Oct., 1848.*

[If the pruning is judiciously done, there will be no danger of injuring the trees. Some knowledge is requisite to summer-prune; the mere pinching off of every shoot that starts is not summer pruning in its true sense. The *leading shoots* should not be shortened but little; but the side shoots and spurs should be kept nipped off to one or two buds; these shoots then become covered with fruit buds. The leading shoot should be encouraged in order to get up a good-sized, as well as handsome shaped, tree. The first time it should be stopped at the length of a foot, or fifteen inches; and, the second time, at half that distance. At the winter pruning, these may be cut back so as to form a regular pyramidal tree. Another year, we shall endeavor to elucidate this by engravings. In the mean time, we would advise summer pruning, with the assurance that the trees will not be injured if they are intended for *quenouilles* or *pyramids*. They will, on the contrary, be full of flower-buds, as Mr. Bissell's are, and, as we think, far less liable to the attacks of blight than if kept in a very vigorous growth.—*Ed.*]

Cleveland Horticultural Society.—This society held its annual meeting for the choice of officers on the 16th of September, Vice President Case in the chair. The following officers were elected:—

President, D. C. Brayton; *Vice Presidents*, Wm. Case, J. M. Woolsey, W. D. Beattie, J. Gallup; *Corresponding Secretary*, J. F. Hanks; *Recording Secretary*, James Houghton; *Treasurer*, H. F. Brayton; *Librarian*, B. Stair.

The following Resolution was passed at this meeting:—

Resolved, That Hovey's work of the colored *Fruits of America* be ordered for the use of the Society, and that the proper committee be instructed to procure the same forthwith.

American Almonds.—We are indebted to Mrs. William A. Banker for a sample of almonds raised in her own garden. They are of extraordinary size, and fine flavor. This, and other experiments, prove that our climate is not unfavorable to the growth of many plants and fruits for which we are in the habit of looking abroad.—*Winchester, Va., Republican*.

There is little doubt that the cultivation of almonds can be rendered profitable in Georgia and other southern states. The growing of fruits of this kind would tend greatly to increase their consumption, benefit small landholders, and, by so much, check the over-production of cotton. If one has seeds that will germinate, now is a favorable season to plant them.—*Augusta Chronicle*.

ART. III. Exhibitions of Horticultural Societies.

Albany and Rensselaer Horticultural Society.—The second annual exhibition of this society was held in the Geological Rooms, State street, on the 14th and 15th of September, and was, in all respects, considering the season, a most gratifying exhibition.

The Society are under great obligations to Messrs. David Thomas, of Anzora, J. J. Thomas, of Macedon, Wm. Rankin, Esq., of Newark, N. Jersey, and S. C. Groot, of Schenectady, for the choice collection of fruits presented by them for exhibition, and which are more particularly referred to in the report of the committees.

The friends of the society have every reason for encouragement from this exhibition, and it cannot be doubted, that this society is now so established as to realize all that its earliest friends anticipated from its organization.

In the absence of the secretary of the society, Mr. R. F. Johnstone, of this city, kindly proffered his services, and aided in the arrangement and preparations for the exhibition.

FLOWERS, PLANTS, &c.—The committee on greenhouse plants, flowers, floral designs, &c., beg leave to report that there were exhibited:—

By J. Rathbone. Two magnificent floral designs; one of entirely novel form, possessing great grace and beauty, and both composed of very choice flowers, arranged with skill and good taste. Twenty varieties of dahlias of rare kinds and fine blooms, but, as no list accompanied them, the committee are unable to give the names. Thirteen varieties of roses.

By J. Wilson. Eighty varieties of dahlias, embracing all the late and rare kinds, and very beautiful blooms. A large and beautiful collection of roses, among which were the following:—*La Reine*, *Prince Albert*, *Marquis Boccella*, *Madame Dameme*, *Duchess of Sutherland*, *Mrs. Cripps*, *William Jesse*, *Dr. Roques*, *Phoenix*, *Crimson Globe*, *Queen*, *Admiral Desprez*, *Solomon*, *Madam Newman*, *Countess Duchatal*. A choice collection of phloxes, also of verbenas, among which were the following:—*Monk's purple*, *Boston white*, *rosea superb*, *Davidson's pink*, *Briell's Purple*, *Feast's White*, *Fulgens*, *Eclipse*, *Davidson's Tricolor*, *Briell's Fulgens*, &c. Two beautiful bouquets, one round and one flat, composed of rare flowers, and arranged with much taste, and a very handsome show of German asters.

By Louis Menand, Watervliet. Six greenhouse plants in pots, viz.:—*Erica cruenta*, *E. blanda*, *Combrètum purpureum*, *Fuchsia globosa*, *Cereus Smithianus*.

By W. Newcomb. Eighty varieties of dahlias, a very choice collection and perfect flowers, a very beautiful show of German asters, and a flat parlor bouquet, made up with much taste and care.

By Henry Vail, Troy. A round centre table bouquet, composed of very rare flowers, and constructed with much taste, and a new and elegant dahlia, called the Metropolitan Green.

By Dr. H. Wendell. A very handsome basket-shaped bouquet, one round bouquet, a large and choice collection of dahlias, German asters, and verbenas, some seedlings among the latter being exceedingly beautiful.

By V. P. Douw. A very handsome collection of flowers, consisting of *Noisette* and *Perpetual roses*, verbenas, ericas, *Passion flowers*, &c.

By Amos Briggs, Schaghticoke, two round bouquets, displaying much

taste and skill in their construction, and a handsome collection of dahlias, German asters, roses, heliotropes, &c.

By Dr. James Wilson. A box containing a very beautiful collection of dahlias.

The committee have awarded the premiums as follows :—

For the best six plants in pots, to Louis Menand, \$2.

For the best display of dahlias, to James Wilson, \$3.

For the twelve best dissimilar blooms, to James Wilson, \$2.

For the best single bloom, (the Duchess of Orleans,) to J. Wilson, \$1.

For the best six dissimilar blooms, to W. Newcomb, \$1.

For the best display of German asters, to W. Newcomb, \$2.

For the second best display, to James Wilson, \$1.

For the best twelve varieties of verbenas, to James Wilson, \$2.

For the best six varieties of verbenas, to Dr. H. Wendell, \$1.

For the best seedling verberna, never before exhibited, to Dr. H. Wendell, \$1.

For the best ten varieties of roses, to J. Wilson, \$2.

For the best six varieties do., to J. Wilson, \$1.

For the best and most beautiful floral design, to J. Rathbone, \$3.

For the second best, to J. Rathbone, \$2.

For the best flat parlor bouquet, to Wm. Newcomb, \$2.

For the best round centre table bouquet, to H. Vail, \$2.

For the best pair of hand bouquets, to J. Wilson, \$2.

For the best basket bouquet, to Dr. H. Wendell, \$2.

All of which is respectfully submitted.—*Wm. Newcomb, Chairman.*

FRUIT: The committee on fruit report that there were exhibited :—

By H. Vail, Troy. Twenty-five varieties of pears, viz :—Bell, Beurré d'Arenberg, Gansell's Bergamot, Golden Beurré of Bilboa, Duchesse d'Angouleme, Beurré Diel, Easter Beurré, Comte de Lamy, Heathcot, Brown Beurré, Marie Louise, Louise Bonne of Jersey, Beurré d'Amanlis, Belle Lucrative, Virgoulouse, Williams's Bon Chrétien, Seckel, and seven varieties unknown. Twenty-one varieties of apples, viz :—Tolman's Sweeting, R. I. Greening, Newtown Pippin, English Russet, Detroit, Domine Swaar, Heart's Pippin, Holland Pippin, Black, Pumpkin Sweeting, Jersey Sweeting, Ladies' Sweeting, Golden Sweeting, Fall Pippin, Seek-no-Further, *Æsopus* Spitzenburg, Winter Pearmain, Cumberland Spice, and two varieties unknown. Four varieties of grapes, viz :—Black Prince, Blue Chasselas, Isabella, Catawba. The Noblesse peach.

By Dr. H. Wendell. Twenty-four varieties of pears, viz :—Beurré Bosc, Gansell's Bergamot, Van Mons Leon le Clerc, Julienne, White Doyenné, Duchesse d'Angouleme, Beurré Beauchamp, Muscadine, Beurré Diel, B. Van Marum, Buffum, Passe Colmar, Flemish Beauty, Doyenné Goubault, D. Musqué, Inconnue Van Mons, Excellentiissima, Glout Morceau, Autumn Bergamot, Belle et Bonne de Hee, St. Germain, Seckel, Beurré Louvain, Captif St. Helene.

By E. P. Prentice, Mount Hope. Twenty-six varieties of apples, viz :—

R. I. Greening, Tolman's Sweeting, Gilliflower, Old Eng. Pearmain, Kilham Hill, Baldwin, Ribstone Pippin, Winter Pearmain, Newtown Pippin, and seventeen varieties unknown.

By McCulloch & Kirtland, Greenbush. Nine varieties of apples, viz. :—R. I. Greening, Spitzenburg, Golden Russet, Seek-no-Further, Baldwin, Burk Knot, Tolman Sweeting, Newtown Pippin, Fall Pippin. Four varieties of pears, viz. :—Napoleon, Virgoulouse, Summer Bon Chrétien, Aston Town.

By J. J. Thomas, Macedon, Wayne county. Fifteen varieties of apples, viz. :—Dyer, Bullock's Pippin, Rambo, Wine, Sweet Baldwin, Kilham Hill, Baldwin, Æsopus Spitzenburg, Peck's Pleasant, Swaar, Williamson, Summer Pearmain, Jewett's Red, Late Strawberry, and one unknown. Seven varieties of pears, viz. :—Urbaniste, Williams's Bon Chrétien, Belle Lucrative, Bon Chrétien, Andrews, Washington. Three varieties of peaches, viz. :—Hill's Chili, President, Morris White.

By Judge Parker, Albany. Seven varieties of grapes, viz. :—Sweet-water, Blue Chasselas, Black Burgundy, Winne Fragrant, Isabella, Catawba, and two varieties of pears, namely :—Bergamot and Virgoulouse.

By J. Rathbone. Four varieties of apples, viz. :—Fall Pippin, English Russet, and two unknown. Two varieties of pears, viz. :—Belle Lucrative, and Van Mons Leon le Clerc ; also, a branch of the Ohio Ever-bearing raspberry, loaded with fruit, which the committee deem worthy of cultivation.

By Wm. Rankin, Esq., of Newark, N. J. Seven varieties of pears, viz. :—Williams's Bon Chrétien, Duchesse d'Angouleme, Seckel, Marie Louise, White Doyenné, Gray Doyenné, Colmar d'Aremberg. Three varieties of peaches, viz. :—Crawford, Newington, and one unnamed. Four varieties of grapes, viz. :—Black Hamburg, Isabella, Virginia Bland, White Muscadine.

By Dr. J. M. Ward, of Albany. Six varieties of apples, viz. :—Fall Pippin, Jersey Sweeting, Victuals and Drink, Strawberry, and two unknown.

By Amos Briggs, Schaghticoke. A plate of very handsome Williams's Bon Chrétien pears.

By S. C. Groot, Schenectady. Seven varieties of pears, viz. :—White Doyenné, Beurré de Capiaumont, Beurré Bosc, Bleeker's Meadow, Winter Nelis, Brown Beurré, Flemish Beauty, all fine specimens, and, if the cultivation should be extended, Schenectady will be as celebrated for pears, as it now deservedly is for plums.

By David Thomas, Aurora, Cayuga co., one plate of very beautiful nectarines. By J. D. Chism, Portugal quince, persimmons, and a seedling pear, resembling the old Pound pear. By Hon. John Taylor, Mayor of Albany, Gloria Mundi apples, and Virgoulouse pears. By Judge Harris, of Albany, three varieties of pears, the Williams's Bon Chrétien, Gansel's Bergamot, and De Louvain. By Dr. J. Wilson, Bethlehem, muskmelons, Skillman's Cantelope ; watermelons, the Joppa and Spanish. By Dr. H. Wendell, six varieties of melons, viz. :—Cantelope, Isphan, and four unnamed, Joppa and Spanish watermelons. By V. P. Douw, Greenbush, three varieties of watermelons, viz. :—Joppa, Black Spanish, and

Mountain Sprout; and very fine specimens of Citron melon. By B. B. Kirtland, Greenbush, Skillman's Netted and Bokhara melons. By H. Vail, Mount Ida, Troy, six varieties of very superior melons, viz.: Pine Apple, Nutmeg, Christiana, Green Citron, Skillman's Netted, and Cante-lope.

The committee award the premiums as follows, viz.:—

Apples.—For the best and most extensive collection, to H. Vail, \$3.

Second best to E. P. Prentice, \$2.

Best six varieties, to E. P. Prentice, \$2.

Best one variety, to H. Vail, \$1.

Pears.—Best and most extensive collection, to H. Vail, \$3.

Second best, to Dr. H. Wendell, \$2.

Best six varieties, to Dr. H. Wendell, \$2.

Best one variety, (Seckel,) to H. Vail, \$1.

Peaches.—Best single variety, to H. Vail, \$1.

Grapes.—Best exhibition of foreign, to V. P. Douw, \$3.

Best two varieties, to V. P. Douw, \$2.

Best single variety, to H. Vail, \$1.

Best two varieties, native, to H. Vail, \$2.

Water Melons.—Best two varieties, to Dr. James Wilson, \$2.

Best single variety, to do. do., \$2.

Musk Melons.—Best two varieties, to B. B. Kirtland, \$2.

Best single variety, to Dr. James Wilson, \$1.

Quinces.—Several fine specimens were exhibited, but no premiums are awarded, as the article was unfortunately omitted in the premium list.

All of which is respectfully submitted.—V. P. Douw, *Chairman*.

VEGETABLES.—The committee on vegetables beg leave to state, that the contributions to this department of the exhibition were very numerous, and exceeded in interest any previous exhibition; and that, in many cases, it was very difficult to determine to whom the prize on several articles, should be awarded. However, after due consideration, they have concluded to recommend that the premiums should be awarded as in the report below.

The contributors were E. P. Prentice, J. H. Willard, Troy, V. P. Douw, F. Keisel, Dr. Wendell, J. Rathbone, Dr. Wilson, and others, but we have no room to enumerate the varieties in detail.

PREMIUMS.—For the best new seedling potato, to Dr. H. Wendell, \$2.

For best half peck winter potatoes, (Mercer's,) to J. H. Willard, of Troy, \$1.

For best winter squashes, to E. P. Prentice, of Mt. Hope, \$1.

For best long blood beets, to V. P. Douw, of Wolvehook, \$1.

For best carrots, to E. P. Prentice, of Mt. Hope, \$1.

For best parsnips, do. do., \$1.

For best egg plants, to Joel Rathbone, of Kenwood, \$1.

For best winter cabbage, to J. H. Willard, of Troy, \$1.

For best broccoli, to Joel Rathbone, of Kenwood, \$1.

For best celery, to Frederick Keisel, of Albany, \$1.

For best martynias, to Wm. Newcomb, of Pittstown, \$1.

For best tomatoes, to Joel Rathbone, of Kenwood, \$1.

For greatest number of varieties of tomatoes, to E. P. Prentice, \$1.—

R. F. Johnstone, Chairman.

New Bedford Horticultural Society.—This young and flourishing society held its annual exhibition at New Bedford on the 27th, 28th, and 29th of September last. We had intended to have been present ourselves by the kind invitation of the society, but could not make it convenient to do so. A full report has been sent to us, but to give it in detail would occupy several pages. A great display of plants in pots, bouquets, designs, &c., was made, and the number of contributors very large for an association so recently formed. It argues well for the interest taken in the subject in this city.

The principal collections of plants in pots were from James Arnold and W. R. Rodman, Esqrs. Bouquets and cut flowers were furnished by many contributors.

FLORAL DECORATIONS.—These were very creditable, and were as follows:—

From Wing Russell. A pyramid of flowers, eight feet high, composed of amaranths, asters, dahlias, and coreopses, standing on a plinth or pedestal covered with moss. A dome constructed with dahlias, and surmounted with amaranths, cockscomb, clematis, and ground pine, a very handsome structure. A shield or circular design, covered with dahlias.

From Wellwood Young. Two pyramids of flowers, amaranths, asters, &c. A shield, or circular design, the ground of moss, ornamented with dahlias and globe amaranths.

From Mrs. James Arnold. Two pyramidal bouquets of dahlias, salvias, fuchsias, nasturtiums, and other flowers. A vase covered with autumnal leaves, containing a great variety of dried grasses. This was one of the most attractive features of the exhibition.

From Dr. M. B. Roche. Algae-seaweeds, one hundred and fourteen specimens, very nicely and carefully preserved. Of the many interesting objects collected in the Hall, we believe none were more admired, or attracted greater attention than these.

From Wm. M. Howard. Model of a church, with its elevated spire, placed on a mound four feet in height,—the whole covered with moss, and ornamented with dahlias, zinnias, globe amaranth, and many other flowers.

From John Gibson. Flora's Temple, an open hexagonal structure, the floor and basement covered with mosses and lichens, the pillars wreathed with ground pine. It was inlaid and ornamented with pansies, zinnias, globe amaranths, cockscomb dahlias, china asters, &c. The circumference at base was twenty-four feet, and the height thirteen feet.

From Robert Allen. A cottage, form quadrangular, five feet in front, three and one half in depth, and eight feet in height. This also was covered with moss, and adorned with dahlias, clematis, globe amaranth, marigold, heliotrope, and other flowers. A moss covered seat within.

From Wellwood Young. An octagonal temple, eight feet in height,

the sides interwoven with mosses and lichens, and lined with arbor-vitæ within. It was profusely ornamented with dahlias, asters, globe amaranth, and gnaphalium. Circumference of the base sixteen feet, of the temple, thirteen and one half feet.

The Hall was beautifully and tastefully decorated with evergreen trees and shrubs procured from our native woods. Conspicuous among these were the hemlock, the white cedar, the two pines, the single spruce, the laurel, the black alder, and the inkberry. The pillars were also wreathed and festooned with the common ground pine, *Lycopodium complanatum*. Another and more beautiful species of the ground pine, *L. dendroideum*, or tree weed, was also freely used in the decorations. In the preparation and arrangement of these, the committee was kindly assisted by the skill and taste of some gentlemen not of their own number. Our acknowledgments are more especially due to Josiah S. Bonney, and John F. Akin, in these particulars.

FRUIT: The committee, in presenting their report, feel highly gratified, in being able to state, that the exhibition of fruits on the occasion, far exceeded their most sanguine expectation. And this may be said, not only with reference to the quality of the specimens exhibited, but also with regard to the quantity. Although the number of varieties was small, when compared with those upon the tables of the Massachusetts Horticultural Society, at their recent annual exhibition, still, your committee believe, that, in point of size, beauty, fine appearance, &c., the specimens upon our tables were in no respect inferior to theirs. Many of the specimens of pears—which fruit most decidedly took the lead—were indeed very beautiful, extremely large and handsome, and bore ample evidence of successful culture. The grapes, grown under glass, were also very fine, and elicited much admiration. The contributions of grapes, peaches, &c., from Nahum Stetson, Esq., of Bridgewater, and of fifty varieties of pears from R. Manning, Esq., of Salem, were very fine, especially the former, and attracted very general attention. The committee feel very grateful to these gentlemen, for their kindness in furnishing us with their contributions.

The following is a list of the fruits exhibited, viz:—

From James Arnold, President of the Society, by Wellwood Young. *Grapes.* Victoria, very fine, berries very large, largest exhibited; Black Hamburgh, very handsome; Syrian; Horatio; Muscat of Alexandria, cluster, very large; White Sweetwater, cluster large and handsome. *Pears.* Napoleon; Seckel, very fine; Williams's Bon Chrétien; Duchesse d'Angouleme, large; Passe Colmar; Louise Bonne of Jersey; Beurré Rance; St Germain; and a pear for a name, which the committee pronounce the Passe Colmar. *Peaches.* Belle de Vitry, Morris's White, Lafayette, and a seedling of medium size. *Apples.* Wing Sweeting, Roxbury Russet, R. I. Greening, and Seek-no-Further. *Melons.* Green Persian.

From John Howland. *Pears.* Beurré Bosc, large and very handsome; Brown Beurré; Dix; Beurré d'Aremberg; Seckel, large; Winter Nelis; St. Germain, fair specimens; Ananas; White Doyenné; Passe Colmar;

Napoleon; a Bergamotte pear; and three other varieties without names. *Grapes.* Black Hamburg, and two other varieties grown under glass. Mr. Howland also exhibited a dish of Black Hamburg grapes, grown in open culture, which were handsome. *Peaches.* Old Newington.

From Wm. T. Cook. *Pears.* Bleeker's Meadow; Marie Louise, very large and the best exhibited; Seckel; Winier Nelis; Frederick of Wurtemberg; Passe Colmar; Napoleon; White Doyenné, large, fine, and handsome, although grown upon the pear stock; Stevens's Genesee, very large and handsome specimens; Golden Beurré (?) fruit hardly second quality, coarse; and a variety without a name. *Apples.* Pennock's Red Winter, and Porter, from Warren's garden, Brighton.

From Henry H. Crapo. *Grapes.* Royal Muscadine, Black Hamburg, Sweetwater, Zinfindal, Isabella, and a native variety. *Peaches.* Orange Cling, and a variety not known. *Apples.* Baldwin and Fall Pippin. *Pears.* Fulton, Belle Lucrative, Madotte, Louise Bonne of Jersey, Henry IV., Napoleon, Le Curé, Golden Beurré of Bilboa, Verte Longue, White Doyenné, Jean de Witte, Beurré de Capiaumont, Wilbur, Brown Beurré, Beurré d'Aremberg, Doyenné Boussock, a very handsome pear, which shows promise of being first-rate; Passe Colmar, Williams's Bon Chrétien, Seckel, Duchesse d'Angouleme, Colmar D'Aremberg, Beurré Diel, Beurré Beaumont, Belle et Bonne, (?) and two other varieties without a name. *Quinces.* Orange.

From Charles W. Morgan, by John Gibson. *Pears.* Surpasse Virgoulouse, Beurré Capiaumont, Beurré d'Aremberg White Doyenné, large and handsome. St. Ghislain, Johannot, a very fine pear, Duchesse d'Angouleme, Beurré Diel, Passe Colmar, Wilkinson (?) Seckel, Frederick of Wurtemberg, Golden Beurré of Bilboa, Urbaniste, Harvard, and one other variety without a name. *Peaches.* Jacques, Morris White, and two seedling varieties. *Grapes.* Black Hamburg, finest color exhibited. St. Peter's, Muscat of Alexandria. *Apples.* Seek-no-Further, Tollman Sweeting, Pumpkin Sweeting, Gilliflower, Wing Sweeting, Ribstone Pippin, R. I. Greening, and two varieties without a name. *Quinces.* Orange. *Melons.* Musk.

From Benjamin Rodman. *Pears.* Beurré Diel, Flemish Beauty, best exhibited; Louise Bonne of Jersey, large; Beurré Bosc, Wilkinson. *Peaches.* Kenrick's Heath, Red Cheek Malacoton, Lemon Cling, beautiful; Washington Free, Barrington, Malta, Crawford's Late Melacoton. *Apples.* Pumpkin Sweeting, Roxbury Russet, Tollman Sweeting, Baldwin, R. I. Greening, and a variety without a name.

From John M. Howland, of Fairhaven. *Pears.* White Doyenné, Glout Morceau, Napoleon, Duchesse d'Angouleme, large; Passe Colmar, very fine; Doyenné Gris, which the committee pronounce the Old Orange Pear, and poor, Bezi de la Motte, Franc Real d'Hiver, Verte Longue, Beurré Diel, Beurré de Capiaumont, Williams's Bon Chrétien, and two other varieties. *Apples.* Baldwin, Roxbury Russet, R. I. Greening, Daniel, Wing Sweeting, Spice Sweeting, Newtown Spitzenberg, Tollman Sweeting, and two other varieties without a name.

From Andrew Robeson, by Wm. Brims. *Pears.* Frederick de Wurtemberg, Passe Colmar, largest exhibited; Wilkinson, very fair; Beurré Diel, Louise Bonne of Jersey, Heathcot, Seckel, large and very handsome; Easter Beurré, Glout Morceau, largest exhibited. *Grapes.* Black Hamburg, cluster very large and handsome, but not high colored; White Portugal, cluster and berries large and very handsome. *Peaches.* Red Cheek Melacoton, grown upon a standard tree, and very handsome.

From William P. Jenney, of Fairhaven. *Pears.* Beurré Diel, Colmar d'Aremberg, largest exhibited; Le Curé, very large and handsome; White Doyenné, very perfect in form, and large; Beurré Dore, Comtesse de Lunay, Beurré Bosc, Beurré de Capiaumont, large and handsome.

From R. N. Swift, of Fairhaven. *Pears.* Marie Louise, Louise Bonne of Jersey, Golden Beurré of Bilboa, Easter Beurré, Beurré D'Ete, (!) Beurré Bosc, Beurré Beaumont, Napoleon, Dunmore, Cushing, Gansel's Bergamot, Glout Morceau, White Doyenné, Beurré de Capiaumont. *Apples.* Porter.

From William Swift. *Pears.* Williams's Bon Chrétien, Beurré Bosc, large; Passe Colmar, Harvard, Seckel, Duchesse d'Angouleme, Easter Beurré, Heathcot, Beurré D'Aremberg, Lewis, best exhibited; Beurré Diel, Beurré Rance, best exhibited. *Apples.* Seek-no-Further. *Grapes.* Troy, Catawba, best exhibited; Isabella.

From George Randall. *Pears.* Wilkinson, Beurré de Capiaumont, Lewis, Frederick de Wurtemberg, Passe Colmar, Bartlett, very fine; Frank Real d'hiver, Capsheaf, Seckel, Buffum, Pope's Quaker, as labelled, but which the committee believe, will prove to be the Frederick de Wurtemberg. Capt. Randall also exhibited a dish, labelled "Seckel," but which the committee, after a careful examination, pronounced to be the Capsheaf, a good second-rate pear. *Apples.* Baldwin, Amory, Cooper, Dawson, R. I. Greening, Comey, Lilly Pippin, Pear Apple, Codlin, John Goodwin, Catlin, Male Carle, Tollman Sweeting, Pennock's Red Winter, Warner's Apple, Peck's Pleasant, Tewksbury Winter Blush, Newtown Spitzenburg, Golden Russet, Gravenstein, American Golden Russet, Margold, Nonsuch, Nocore, Green Newtown Pippin, Roxbury Russet, Summer Rose, Red Doctor, Yellow Belle Fleur.

From Samuel Rodman. *Pears.* Beurré Diel, very large and handsome; Beurré Bosc, Duchesse d'Angouleme, very large; Passe Colmar, Seckel, very large; Napoleon, largest in the hall; Lewis, and four other varieties without names.

From Wm. R. Rodman, by Robert Allen. *Pears.* Brown Beurré, Surpasse Virgoulouse, and one other variety without a name. *Muskmelons* and oranges.

From J. S. Bonney. *Grapes.* Isabella, Sweetwater, Black Hamburg, Grizzly Frontignan. *Pears.* Hacon's Incomparable, (!) Duchesse d'Angouleme; also, Orange quinces, and Baldwin apples.

From Dr. Roche. *Pears.* Passe Colmar, very fair and handsome, Wilkinson, Seckel, and Heathcot, each being the largest exhibited of those varieties, and very handsome.

From John B. Burgess. *Cranberries.* Three varieties, one having large

white, one large red, and one small mottled berries. *Grapes.* Isabella. *Plums.* Common Beach.

From Nahum Stetson, Esq., of Bridgewater, by Henry Reed. *Grapes.* Black Hamburg, New Black Hamburg, Wilmot's Black Hamburg, Grizzly Frontignan, White Frontignan, Rose Chasselas, Syrian, Esperione, all very fine. *Peaches.* Stetson's Seedling, Morris' White, and three other varieties, all large and handsome. Also the Brunswick Fig.

From the Hon. Joseph Grinnell, by Wing Russell. *Pears.* Bartlett, and Frederick de Wurtemberg, both fine. *Peaches.* Two seedling varieties. *Apples.* Tollman Sweeting, R. I. Greening, Fall Pippin, Golden Russet, and six other varieties without names. *Grapes.* Chasselas de Fontainebleau, St. Peter, Black Hamburg, White Portugal, a very fine cluster, and one of the handsomest exhibited.

From Abraham H. Howland. *Pears.* Beurré Diel, very large, Passe Colmar, Seckel, Louise Bonne of Jersey, Beurré Rance, Marie Louise, large, and one other variety without a name.

From L. C. Tripp, of Fairhaven. *Pears.* Henry IV., (?) Bartlett, Flemish Beauty, (?) Easter Beurré. *Apples.* Baldwin, Roxbury Russet, Blue Pearmain, Golden Russet, Sawyer Sweeting, Tollman Sweeting, Red Siberian Crab.

From John A. Parker. *Pears.* White Doyenné, very large and handsome, the best exhibited, Beurré Diel, Passe Colmar, large; Winter Nelis, largest exhibited; Bezi de la Motte, Easter Beurré, Seckel, Marie Louise.

From George Hussey. *Pears.* Seckel, and Beurré Diel, both very large. *Grapes.* Isabella, and Orange Quinces.

From J. C. Delano. *Pears.* Colmar d'Aremberg. *Apples.* R. I. Greening, Fall Pippin, Tollman Sweeting.

From Wm. Rotch, Jr., by Wm. M. Howard. *Pears.* Wilkinson, Henry IV., Washington, Louise Bonne of Jersey, and a variety without a name, worthless. *Apples.* Baldwin.

From Wm. R. Rotch, by Wm. Brown. *Quinces.* Pear and Orange. *Apples.* Baldwin, R. I. Greening, Roxbury Russet, Lady Apple.

Upwards of *sixty* other persons contributed small collections of fruit, for which we have not room for the names. Mr. Manning, of Salem, sent upwards of *fifty* varieties of the pear. We are indebted to Mr. H. H. Crapo, the chairman of the fruit committee, for a corrected copy of the report.

The show of vegetables was large,—and comprised a good variety,—adding much to the interest of the exhibition.—*Ed.*

Worcester County Horticultural Society.—The annual exhibition of this society was held in Worcester, on the 26th, 27th, and 28th of September, 1848. We had the pleasure of being present at the exhibition, and were highly gratified to see such a remarkable display of fruit, especially of apples, for which Worcester County is justly celebrated. The report of the committee is too long for our columns, and we can only give a brief abstract from it. About *fourteen hundred* plates of fruit were placed upon the tables. Among the newer varieties of apples, we remarked the Chaffin Sweeting, Foundling, Leland Spice, Barrett's Fancy, Judge, and Caprons

Pleasant, all kinds very little known out of Worcester County. The committee preface their report as follows :—

Of the exhibition, in general, we do not hesitate to say that it was eminently successful. The chaste and beautiful decorations of the hall, the unexpected richness of the floral display, the immense quantities, consisting of more than a thousand plates and baskets of fine fruits arranged upon the tables, were the admiration and wonder of all who witnessed them. Competent judges, among the numerous strangers who were present, expressed their opinions very decidedly, that the varieties of valuable apples exhibited surpassed in number and beauty any show of the kind ever before seen in the United States. The pears also were, in some varieties, very fine, and all of them better than an unpropitious season had led us to anticipate. Beautiful peaches also were there, and plums and grapes which a long drought had been unable to shrivel, and myriads of ravaging insects had not found time to destroy.

And it was exceedingly gratifying to perceive, in the improvements which our citizens are making in horticultural knowledge, an evidence that the instruction afforded by these exhibitions has not been lost. The new and better fruits were more numerous exhibited, fewer erroneous names were applied to those which have been long cultivated, and the silly use of local and fancy names was less frequent than formerly.

* * * * *

Owing to the immense quantity of fruits exhibited, it has been deemed advisable to mention only the number of varieties of each sort offered by each contributor. The few deviations from this rule which may be noticed, were made from no other motive than a desire to enhance the value of the report. Those who may feel aggrieved by this summary procedure, will, we hope, become resigned to it by reflecting that probably far more people saw their fruits at the exhibition than would ever read the names of them here if written.

In awarding the premiums, it will be perceived, that the committee did not give more than one to the same individual. It was their object this year to distribute them as much as possible. This will explain what might otherwise be regarded as a very incorrect decision. The first articles laid upon the society's tables were four plates of beautiful Porter apples, two of magnificent Bartlett pears, and a basket of grapes, from Mrs. Amos Brown. Mrs. B. will please to accept the society's thanks for this most satisfactory evidence that the ladies are always foremost in a good cause.

The principal contributors were as follows :—

John Milton Earle, (president of the society,) pears, twenty-nine varieties, constituting the largest and best collection in the hall. But, as Mr. Earle's fruit was withdrawn from competition for the premiums, the first premium was awarded to the next best collection not so withheld. Plums, six varieties; peaches, eight varieties; grapes, Diana, and a seedling from the Isabella. George Jacques. Apples, twenty-three varieties; pears, seven varieties; peaches, eight varieties; grapes, Isabella; quinces, orange. This fruit was not put in competition for the premiums. Charles H.

Hill. Apples, Eustis, and one variety unknown; peaches, which took the society's premium of \$2 as the second best collection of that fruit. Thomas Chamberlin. Gen. C. exhibited apples, of thirty-four varieties, among them the Hog Pen, (the proper name of this beautiful looking apple is Holden Pippin.) James Lawrence Estey. Apples, Greenings and Porter,—the latter received a premium of \$1 50 as the second best plate of not less than four apples.

Gardner Paine. Apples: one plate of a beautiful variety, grown upon a dwarf tree. These little trees are extremely ornamental while in fruit. Pears, Louise Bonne of Jersey, and five other varieties. One of Mr. Paine's Louise Bonne of Jersey took the society's premium of \$1, as the second best single pear in the hall. The society is much indebted to this gentleman for his valuable personal services, not only at this, but also at nearly all the previous exhibitions which have been held. B. F. Keyes, West Boylston. Apples, Nonsuch. This capital old variety is considered by many good judges to be the finest flavored of all winter apples cultivated in New England; two nameless and nine other varieties. David S. Messenger. Apples, six varieties; pears, Beurré Diel; peaches, Brevoort's Morris. (This is one of the highest flavored and most delicious of all peaches.) Late Admirable.

George W. Richardson. Apples, four varieties; pears, six varieties; peaches, Crawford's Late and Nameless: among the former of which was found the peach which received the premium of \$1, as the best single specimen of that fruit in the exhibition. Rufus Hastings, Sterling. Apples, four plates of Harrison Sweeting, (believed to be the Lyscom;) one plate Winter Sweetings; these latter are commonly known by the name of "Pound Sweetings." Silas Allen, Shrewsbury. Apples, Rockport Sweeting. [This apple keeps as well as the Roxbury Russet; it is of good size, and most excellent eating quantities. We consider it a very valuable acquisition.] Also 15 other varieties of the apple, among the names of which we notice "Gentleman's Blush." Capt. Allen may rest assured that this appellation is unquestionably apochryphal. Pears, three varieties; peaches, six varieties; [among them the Red Cheek Malacoton, which took the \$2 premium as the best plate of peaches.] Also, Orange quinces, [big ones—surely Shrewsbury is the banner town of quinces.]

Stephen Salisbury. Apples, seven varieties; pears, ten varieties; quinces, Portugal. William N. Green. Apples, eight varieties; pears, nineteen of the best varieties, including Van Mons Leon le Clerc. Benjamin F. Thomas. Pears, sixteen varieties. These were among the finest collections in the show; peaches, plums, Queen Mother, (a fine variety for the season;) quinces. Samuel M. Burnside. Apples, Blue Pearmain, Black or Detroit. The latter is one of the varieties which the French introduced into Michigan in the old colonial times. S. A. Howland. Peaches, one seedling variety which received the society's premium of \$2, as the best seedling peach. The committee named it the Howland peach. Grapes, Isabella.

Peter Fay, Southboro'. Apples, thirty-four varieties. Mr. Fay's collec-

tion was a very excellent one, and received the premium of \$2 as the second best collection of that fruit. Obadiah B. Hudson. Apples, seven varieties, among them a plate of Hubbardston Nonesuch containing the *best* single apple in the exhibition. The society must therefore pay him a premium of \$1. Jonas H. Allen, Shrewsbury. Apples, six sorts; peaches, Golden Malacoton; (is there any such?) Cotton; (this is a very first-rate kind,) and nine other varieties. This collection took the premium of \$3 as the best collection of peaches. John B. Crawford, Northboro'. Apples, Lyscom, [among which was one that received the premium of \$1 as the second best single apple exhibited.] Mr. C. also had eight other varieties of apples. Charles Hadwin. Apples: Leland Pippin, sometimes called New York Spice. [This is one of the handsomest apples we ever saw. Color, on the shady side, a greenish yellow ground mottled with crimson stripes; on the sunny side, becoming a dark crimson. Size and form, not very different from the Baldwin. The flavor is also most excellent, and a tree of this variety deserves a place in the smallest collection. It is in eating from the first of October to winter.] Mr. H. also exhibited four other varieties of apples; pears, nameless; peaches, seedlings.

Dr. Wm. Workman. Apples, two plates; pears, one plate; White Doyenné, (magnificent specimens.) They were grown upon quince roots, under which mode of culture the old saint still retains his ancient reputation. Of all the saints among pears, this one deserves the first place even in the smallest collection of dwarf trees. Dr. W. took home the pears from the tables, and as the society's premium of \$1 50 from the committee, his being the second best dish of not less than four pears. Dr. John Green. Pears, Le Curé, Columbia, and Dix. The latter received the first premiums of \$2 as the best dish of not less than six pears. Dr. G. also exhibited pomegranates, from South Carolina. Dr. Joshua Porter, North Brookfield. Apples, Monson Sweeting; Pears, six varieties, which were of such valuable kinds and so fine specimens, that the committee, after much comparison with other collections, concluded to award the premium of \$2 to this as the second best collection. Job C. Stone, Shrewsbury. Apples, three varieties, including the Leland Spice, [see above, Samuel Wood's contribution.] This took the society's premium of \$2 as the best plate of not less than six apples. Quinces.

Edward Earle. Three plates of apples. Mr. E. stands corrected for applying the *political* fancy name of "Free Soil" to one of his apples. Pears: fourteen varieties. These fine specimens took the premium of \$3, as the best collection of pears in the exhibition, it being particularly understood that some contributions of this fruit were not entered for premiums. Peaches, Red Cheek Melacoton; grapes, French Sweet Water and Early Native. John Davis, apples and plums. Joel Knapp, Sutton, apples, sixteen kinds,—Note—the true name of Sutton Beauty is Hubbardston Nonsuch. Mr. K. speaks very highly of the Rock River Winter Sweeting in his collection. We believe it to be the same apple as the Rockport Sweeting exhibited by Capt. S. Allen, of Shrewsbury. Mr. K. also had a very beautiful and fine seedling which he calls the Grape Apple.

Capt. S. Perry. Apples. Leonard Cherry, Southbridge, apples, peaches, a fine seedling to be called the Cherry Peach. Mr. C. receives a gratuity of \$1 for this fruit.

Samuel H. Colton, (of the Worcester Nursery.) Apples, forty-three varieties, (altogether the largest collection in the hall.) Pears, twenty-seven varieties; peaches, fifteen varieties; plums, seven varieties; nectarines, Boston, (a beautiful fruit.) Grapes, Isabella and Fitchburg. This latter is smaller than the Blackstone, (see H. Wing above,) but its pulp is less foxy and rather better flavored. Mr. C.'s fruit was withdrawn from competition for the premiums. Hon. Levi Lincoln. A fine collection of fruit, of which, by some oversight, no entry was made on the records. Among the pears, was a Flemish Beauty which received the premium of \$1 50 as the best single specimens of pears. William C. Capron, Uxbridge. Apples, twenty-nine varieties, so valuable and so excellent in their kinds, that the committee—not, however, without some hesitation—concluded to award the premium of \$3 to this as the best collection of apples. Pears, two plates nameless; peaches, three plates. Charles Johnson, Northboro'. One plate pears, Isabella grapes, which took the premium of \$1 as the best grapes of open culture. Samuel Sawyer, Millbury. Apples. Hiram Wing, Northbridge. Pears, Iron; grapes, Isabella and Blackstone. This latter and the Fitchburg are the best two known native grapes that have originated in Worcester County.

Hovey & Co., Cambridge. Pears: specimens of twenty-five varieties, some of them quite new, for which they will please to accept the thanks of the society. Samuel Walker, Roxbury. This gentlemen exhibited and generously gave to the committee fifty-one varieties of pears. Their names may be seen in the society's record. Mr. W. will please to accept the thanks of the committee and of the society also, for this valuable contribution.

The show of vegetables was exceedingly fine, and contained some very large and well-grown specimens.—(*Worcester Spy*.)

Annual Exhibition of the Cleaveland Horticultural Society.—The annual exhibition of this society was held on the 14th and 15th of September at the Empire Hall, Cleaveland. There were *forty-eight* exhibitors against *twenty-six* last year, and the number of varieties of fruits was never before equalled. The very fine character of the fruits generally, was highly satisfactory to the most zealous friends of the society, and passed off with great credit to all concerned.

The principal exhibitors were as follows:—

From George Hoadley, Esq., five varieties of apples; seventeen varieties of pears; peaches, quinces, &c. From McIntosh & Co., thirty varieties of apples; thirty varieties of pears; eight of peaches, grapes, quinces, &c. From E. Morse, Poland, sixty varieties of apples. From J. Gallup eighteen varieties of peaches, including several seedlings; thirty fine varieties of apples; fifteen varieties of pears. From A. C. Hubbard, Troy, Michigan, twenty-seven varieties of apples and other fruits. From Wm.

Case, ten varieties of peaches; eight varieties of apples; ten of pears, and other fruits. From Morse and Houghton, nine varieties of peaches; twelve of pears; eight varieties of apples, and other fruits. We notice that the Baldwin apple was exhibited in several collections under the name of Steele's Red Winter.—(*Cleveland Herald.*)

Pennsylvania Horticultural Society.—The Twentieth Annual Exhibition of this society was held in the Museum Building, Philadelphia, on Wednesday, Thursday, and Friday, the 20th, 21st, and 22d of September, 1848. The exhibition was one of the best ever made by the society, and the report fills a pamphlet of more than *twenty-five pages*. Two of the grand saloons of the Museum Building were occupied,—the lower one with plants, flowers, and designs,—the upper, with the fruits and vegetables. The committee preface their report as follows:—

“The arrangements for the display being, in most respects, very similar to former occasions, a general description seems uncalled for. It may be remarked, however, that, in the lower saloon, an evident improvement was apparent from the substitution of oval tables which surrounded the columns, thereby presenting a greater variety to the scene, and affording intervening spaces, by which the visitors were enabled to inspect with much more facility the many curious and rare plants. An additional effect was also produced by the profusion of evergreen festoons which pended so gracefully from the ceiling.

The floral designs were not so numerous as on former occasions, owing, no doubt, to the long continued drought of the past season.

In the upper saloon, the arrangement was varied with good effect; the tables were placed around the room against the sides; those for the exhibition of fruit on the south were formed of three elevations, with semicircular projections at intervals throughout its entire length; a large one, of semicircular form, rested against the eastern end, and along the northern side, others, corresponding in form with those on the south, were arranged,—on which were shown the profuse contributions of culinary vegetables, which proving insufficient, a long table was added, and extended through the centre, two-thirds of the length of the apartment.

Near the eastern extremity, and dedicated to Pomona, was erected, upon a raised square base, a large open evergreen temple of circular form, which reached nearly to the great height of the saloon; it was supported by eight columns, and canopied with a corresponding number of graceful festoons; opposite and near the entrance of the saloon, under one of the chandeliers, was placed a circular table of several elevations, on which were displayed some of the choicest fruits.

The great number of columns forming the corridor of the gallery were handsomely festooned with evergreen wreaths.”

Plants exhibited.—By Caleb Cope, upwards of sixty plants, including some fine Cactæ. By James Dundas, upwards of one hundred plants. By Peter Mackenzie, upwards of one hundred and thirty plants, including a fine collection of Cactæ. By R. Buist, three hundred plants, including the

following new and rare ones:—*Cereus Maynardii*, *Gardénia Sherboùrnei*, *Barnadèsia ròsea*, *Clématis tubulòsa*, *Weigèlia ròsea*, *Forsythia viridissima*, *Chirita sinénsis*, *Cèstrum aurantiacum*, &c. &c.

Liberal contributions were also furnished by Col. Carr, A. Parker, J. D. Fulton, J. Longstreth, G. W. Carpenter, R. Kilvington, John Dick, James Ritchie, R. Fettes, and others.

Floral Designs, &c.—These were from ten exhibitors, and in great variety and beauty. The premium for the best was awarded to A. Caie, for a design representing a Park entrance; the second to A. Dryburgh, for a fountain; and the third for a pyramid of flowers 18 feet high.

Fruits.—These were shown in greater variety than at any previous exhibition, especially the pears. J. B. Smith, John Rutter, and R. Buist, exhibited about thirty varieties each. Of grapes, Mr. Wm. Westcott, gardener at Eden Hill, sent three bunches of the Syrian, which weighed respectively, $7\frac{1}{2}$ lbs., 7 lbs., and $6\frac{1}{2}$ lbs.

Vegetables.—The exhibition of these was very large, and highly attractive.

Delegations were sent to various societies, and the reports of each are annexed. The delegates to the Massachusetts Horticultural Society are warm in their eulogies upon the last annual show and *Triennial Festival*, and their report is as follows:—

“The delegates are gratified at the opportunity now presented them of recording their appreciation of the kind and hospitable manner in which they were received and entertained by our sister society. During the regular exhibition, all proper attentions were constantly rendered to them, and at the *Grand Triennial Festival*, to which they were particularly invited, seats of honor were provided for them among the most distinguished guests. Of this festival, the delegates cannot speak in terms of sufficient praise. Gorgeous in all its appointments, with tables covered with delicacies, and surrounded by the reverend, the wise, the witty, and the fair, while the senses were delighted with the most brilliant hues, and the most fragrant odors; and the mind was improved by the brilliant outpourings of intellect, the scene was such as cannot be forgotten by those who had the good fortune to participate in its enjoyments.

Your delegates beg to add, that they are satisfied the interchange of visits leads to the happiest results, and they trust that the time is not distant when they can return the courtesies they so abundantly received.”—(*Society's Report.*)

ART. IV. *Massachusetts Horticultural Society.*

Saturday, September 30th, 1848. Exhibited.—**FLOWERS:** Dahlias in great variety from the President, Hovey & Co., J. Breck & Co., P.

Barnes, A. Bowditch, J. Nugent, J. Quant, and Messrs. Winship; a fine specimen of *Anemone japonica*, from Messrs. Hovey & Co., in full flower.

FRUIT: From Messrs. Hovey & Co., Dunmore, Bonne des Zees, Jersey Gratioli, and Beurré Beaumont pears; also Swan's Orange from Rochester. The Committee pronounced the Dunmore fine, the Beurré Beaumont first-rate, and the Swan's Orange as superior to any specimens before exhibited. From H. Vandine, Flemish Beauty pears; Coe's Golden Drop plums, very fine. From S. M. Weld, Colmar d'Arenberg, and Williams's Bon Chrétien pears. From W. S. White, White Chasselas, Red do., and Black Hamburg grapes, all open culture, and fine. From C. E. Grant, Isabella grapes and quinces. From M. H. Ruggles, handsome specimens of the Hull pear, a second-rate fruit; and not to be compared with the Hull, as described by us in our Vol. . We would propose, as this has not yet been disseminated, that the name be changed, to prevent confusion. From Josiah Richardson, Crawford's Late peaches, Flemish Beauty and Beurré Diel pears; Coe's Golden Drop plums, fine. From Galen Merriam, Crawford's Late, Bergen Yellow, and Seedling peaches. From George Wilson, Coe's Golden Drop plums, fine. From Ebenezer Brown, Flemish Beauty, handsome, and Williams's Bon Chrétien pears. From the Chester County Horticultural Society, by J. C. Baldwin, apples, Republican Pippin, excellent; Smoke House, good. From M. Collins, pears, Seedling from St. Michael. It promises to be a very excellent variety.

October 7th.—[The following business, transacted at this meeting, was omitted in our last number.]

Mr. Newhall, Chairman on Medals, made the following report:—

The committee chosen some time ago, to obtain medals for the use of the Society, have attended to the charge, and herewith present their Report.

Immediately after their appointment, your committee engaged the services of Mr. Mitchell, who has finished a die for the *Society's Medal*; fifty silver medals have been stamped at the mint, in Philadelphia, and placed in the hands of the Treasurer of the Society.

The same artist has recently executed a die for the *Appleton Medal*, twenty-five of which have been stamped in *Bronze*, in Philadelphia, five have been given to Samuel Appleton, Esq., whose image it bears, the others are herewith presented for the use of the Society. The sum demanded for the Society's medal, was two hundred and fifty dollars, and for the Appleton medal, one hundred and twenty-five dollars, which amounts have been paid by the treasurer.

Your committee have examined many medals by other artists, and find those executed for this Society, equal to any they have seen, either European or American, and, in their opinion, reflect great credit upon the distinguished artist, Francis N. Mitchell, Esq.: your committee were further charged to procure another die for a medal, for the Society, but, at the re-

quest of the Executive Committee, have deferred further action, until otherwise instructed, by a vote of the Society.

All which is respectfully submitted.

CHEEVER NEWHALL, *Chairman.*

The report was accepted, and it was voted that each member of the Committee, together with the President of the Society, be presented with a copy of each medal executed in bronze.

Wm. Hill, South Boston, and Charles J. Hendee, Roxbury, were elected members.

Adjourned two weeks to October 21st.

October 14th. Exhibited.—FRUITS: From A. S. Lewis, Roxbury Russet apples; Easter Beurré, Winter Nelis, Frederic of Wurtemberg pears, and a variety of pears for a name, not in eating. From T. P. Beal, apples, named Golden Pippin, but not correct. From J. Washburn, quinces, fine. From S. Downer, Jr., Belle et Bonne, and Louise Bonne of Jersey pears. From O. Johnson, Beurré Van Marum pear. From A. Bowditch, Hacon's Incomparable pear, flavor fine. From W. R. Austin, fine specimens of Duchesse d'Angouleme pears, large and fair. From Mrs. B. Adams, a seedling pear for a name, medium size, melting, juicy, and a good flavor, said to be known in Quincy, as the Adams pear. From George Newhall, Louise Bonne of Jersey, Fulton, Urbaniste, Frederic of Wurtemberg, Cumberland, Dix, Passe Colmar, and Le Curé pears. From Josiah Richardson, a basket of fine Isabella grapes. From John Crafts, a basket of good Isabella grapes; a seedling grape, raised from the Isabella, which was unworthy of cultivation. G. W. Haven, a seedling (?) plum.

October 21st.—An adjourned meeting of the Society was held to-day—the President in the chair.

A letter was read from Edward Bartlett, Esq., accompanied with seeds of an ornamental tree, from Vancouver's Island. The thanks of the Society were voted to Mr. Bartlett.

The following gentlemen were elected members: Samuel A. Appleton, Francis Boyd, H. L. Daggett, and Jonathan Ellis, Boston, Geo. Pierce, West Cambridge.

Adjourned two weeks, to Nov. 4th.

Exhibited.—FRUITS: From E. M. Richards, pears, supposed to be Urbaniste; also, Fall Harvey, Fall Pippin, Lyscom, Boxford, Minister apples. From Otis Johnson, apples, for a name. From E. Cooper, apples for a name. George Walsh, St. Michael's, Beurré Diel, and Winter Nelis (?) pears, for a name. From S. Leeds, Duchesse d'Angouleme pears, very fine, one weighed 24½ oz. From J. F. Allen, Syrian, Wilmot's Black Hamburg and Black Hamburg grapes; Seckel pears. From J. Stickney, Urbaniste pears; Hubbardston Nonsuch, and Twenty Ounce apples, both very fine. From S. Downer, Jr., Verte Longue d'Automne pears, fine, and three sorts for a name. From W. Kenrick, specimen of Osage Orange. From H. Haseltine, quinces. From Henry Vandine, Orange and Portugal quinces; Marie Louise pears, very fine, also, Seckel, St. Michael's, fine.

The committee tested the following fruits:—

From S. W. Cole, apples, raised by Levi Gates, Mercer, Maine, large, handsome. From John Parsons, Jr., Rockport apples. From John Frothingham, Esq., of Montreal, St. Lawrence apples. From O. Johnson, apples, very fine, large size, supposed to be a seedling. From S. Walker, Delices d'Hardenpont, a fine pear, worthy of cultivation. From Rev. Francis Cunningham, Beurré Diel, and Urbaniste pears.

October 28th. *Exhibited.*—FRUITS: From Geo. Pierce, Baldwin apples. From Moses Kent, Twenty Ounce apples. From George Newhall, Catillac, Pound, and Black Pear of Worcester; Tippecanoe and Hubbardston Nonsuch apples. From O. Johnson, large basket of Duchesse d'Angouleme pears, of extra size. From John A. Webber, Canada Reinette apple. From Galen Merriam, two baskets Doyenné Blanc pears, handsome and of good size. From John Washburn, quinces of every variety; the *true* Portugal of large size—some of which specimens, weighing a pound each—of the Orange quinces, he had specimens, weighing twenty ounces.

AWARD OF PREMIUMS ON FRUITS.

PEACHES.—To Nahum Stetson, the first premium, for Early Crawford, \$6.

To Hovey & Co., the second premium, for the Jacques, \$4.

SPECIAL PREMIUMS FOR PEACHES.—To N. Stetson, for Early Crawford, \$5.

To Hovey & Co., for Jacques, \$5.

To Galen Merriam, for Oldmixon, \$5.

PLUMS.—To S. Walker, the first premium, for Green Gage, \$6.

To Edes Bradshaw, the second premium, for Washington, and Bradshaw, \$3.

MELONS.—To Hovey & Co., the first premium, for Beechwood, Persian green flesh, and Christiansa, \$5.

To E. M. Richards, the second premium, for Christiansa, \$3.

GOOSEBERRIES.—To J. Hovey, the first premium, \$5.

To F. W. Macondry, the second premium, \$3.

FIGS.—To Hovey & Co., the first premium, for White Marseilles, Black and White Ischia, \$5.

To J. F. Allen, the second premium, for Black Fig of St. Michael, \$3.

GRAPES.—Exhibited after July 1.

To A. Bowditch, the first premium, for Black Hamburgh, and Zinfindal, and White Frontignan, \$10.

To O. Johnson, the second premium, for Black Hamburgh, Zinfindal, and Muscat of Alexandria, \$7.

NATIVE GRAPES.—To Josiah Richardson, the first premium, for Isabella, \$5.

To J. Craft, the second premium, for Isabella, \$3.

NECTARINES.—To W. C. Strong, the first premium, \$6.

To S. Walker, the second premium, \$4.

November 4th.—An adjourned meeting of the Society was held to-day—the President in the chair.

A letter was received from Wm. R. Bunnell, in regard to a preventive for the ravages of the curculio, and all other insects of a similar nature.

Voted,—That it be submitted to the Fruit Committee, to take such action upon it, as they deem fit, and notice given to Mr. Bunnell, of such disposal, by the Corresponding Secretary.

The following gentlemen were elected members :—Thomas Hastings, East Cambridge, Paran Stevens, Boston.

Adjourned for two weeks, to Nov. 18th.

Exhibited.—**FRUITS**: From S. Walker, Columbia, Duchesse d'Angouleme, Passe Colmar, and Van Mons Leon le Clerc pears, all fine; Beurré Dore, McLaughlin, Quetelet, Champaigne (new,) Figue, Fourcroy, Belle et Bonne, Queen of the Low Countries, Moor Fowl Egg; also, White Seek-no-Further apples. From S. R. Johnson, Beurré Diel, and Dix pears, fine. From Josiah Stickney, Surpasse Virgoulouse pears, (!) Roxbury Russet, and Rhode Island Greening apples, fine. From Francis Dana, Seedling pears, fine. From O. Johnson, Le Curé pears. From S. Downer, Jr., Beurré Diel, fine, Le Curé, fine, Duchesse d'Angouleme, Epine Dumas, Easter Beurré pears. From S. Henshaw, from Western New York, specimens of the following apples, Black Detroit, Vandervere, Cabashaw, Fall Pippin, Winter Pippin, Peck's Pleasant; also, Uvedale's St. Germain pears.

November 11th. Exhibited.—**FRUIT**: From James Eustis, Ben and Philadelphia Pippin (!) apples. The committee recommended the Ben Apple, good for the season, and worthy of cultivation. From S. Walker, pears, viz.:—Le Curé, fine; Crassane, fine; Winter Nelis, Figue, very fine; Verte Longue d'Automne, Columbia, and Beurré Duval. From Otis Johnson, Lawrence Pear. From F. Dana, Roxbury, a seedling pear four years from seed, the same as reported last week. From Hovey & Co., Beurré d'Anjou and Knight's Monarch pears. From L. B. Comis, Passe Colmar pears, very fine and highly flavored.

AWARD OF PREMIUMS ON FRUITS.

QUINCES.—To J. Washburn, the first premium for fine specimens, \$6.

No second premium awarded.

November 18th.—An adjourned meeting of the Society was held to-day, —the President in the chair.

The Committee appointed to present the late Recording Secretary, Mr. E. Wight, with a piece of plate of the value of \$50 reported that they had attended to that duty, and submitted the correspondence.

An article having appeared in Bement's *Journal of Science*, which the President thought derogatory to the character of the Society, he read extracts from the same, and asked the action of the Society upon it,—and the Hon. J. S. Cabot offered the following resolution :—

Whereas an article signed Fidelius has appeared in the November number of the American Journal of Agriculture and Science, published by C. N. Bement, Esq., Albany,—and whereas said article is not only derogatory to the character of this Society, but to our worthy President, the President elect, and the Delegation to the late National Convention at New York,—

therefore, *Voted*, unanimously, that the Recording Secretary be directed to respectfully request of the editor of said journal the name of the author of the said communication.

Mr. Cabot also offered the following motion:—*Voted*, that a committee be chosen to consider and report to the Society upon the expediency of the adoption, by this Society, of some measures to obtain and disseminate information as to the best mode of cultivating fruits.

J. S. Cabot, S. Walker, D. Haggerston, C. M. Hovey, E. M. Richards, M. P. Wilder, Jos. Breck, B. V. French, and O. Johnson were appointed a committee of nine to report upon the same.

The following members were elected. Samuel Leeds, South Boston, C. H. Webb, Chelsea, B. F. Hatch, Saugus.

Adjourned two weeks to December 2d, 1848.

Exhibited.—FRUITS: From S. Walker, *Le Curé*, fine specimens, *Figue*, and *Quetelet* pears; also *Ladies' Sweeting* apples. From J. S. Cabot, *Comte de Michaux*, *Beurré des Charneuses*, *McLaughlin*, and *Commodore* pears, the latter the same as the *Passe Colmar*. From S. Cole, *Hurlburt* apples, a very good variety, and worthy of cultivation.

From Hovey & Co., *Knight's Monarch* pears, premature specimens, which the committee pronounce "of good flavor, but not equal to the high reputation which has preceded this variety." Also, a pear received as the *Dingler*, a very fine flavored variety. From J. Gordon, *Passe Colmar* pears.

November 25th. Exhibited.—FRUITS: From Hovey & Co., *Knight's Monarch* pears, and the *Dingler*, the same as exhibited at the last meeting, pronounced by the Committee "fine." From O. Johnson, very fine *Le Curé* and *Passe Colmar* pears. From S. Downer, fine *Le Curé* and *Passe Colmar* pears. From S. Walker, *Figue*, *Le Curé*, *Columbia*, *Monarch*, *Chaumontelle*, *Winter Nelis*, *Glout Morceau*, and *Beurré d'Arenberg* pears. From J. Albree, handsome *Easter Beurré* pears.

HORTICULTURAL MEMORANDA

FOR DECEMBER.

FRUIT DEPARTMENT.

Grape vines in the greenhouse, if not yet pruned, should be attended to this month: after this is done, the vines should be washed as we directed last month. In cold houses, if the wood is now fully ripe, as it should be if properly managed, pruning may also be finished, the vines washed, and laid down and covered with straw or litter, or even buried in the earth: where mice are troublesome, the latter is the best plan, as manure gives them a better opportunity for working among the shoots. Vines in pots should be pruned, and placed in a pit or shed, where the temperature will not fall below 25°. *Isabella* and other hardy vines may now be pruned with the best success.

Strawberry beds should be immediately protected with a light covering of manure, straw, or seaweed.

Raspberry vines should be laid down and covered with earth.

Fruit trees will be greatly benefited if protected around the roots with half a barrowful of manure to each tree.

Scions for grafting may be cut now, and placed away in earth in a warm shed or cellar till spring.

FLOWER DEPARTMENT.

Camellias should be attended to as we advised last month. Syringe the foliage freely in all fine weather. If seeds are wanted, impregnate the blossoms as soon as they open. Cuttings may be put in now with success. Sow seeds if any are yet left out of the ground.

Hyacinth, tulip, and other bulbs, should be protected with three or four inches of manure or leaves.

Pelargoniums for early blooming may now have a shift into larger pots. Keep them cool and rather dry, and the specimens intended for late blooming should have the tops pinched off.

Sparaxis, ixias, and other Cape bulbs, should now be liberally watered.

Verbenas should be repotted if fine large plants are wanted.

Cyclamens will now be showing flowers, and will require more liberal watering.

Azaleas should still be kept rather dry.

Heliotropes which have filled the pots with roots should now be shifted into larger pots.

Tree pæonies now brought into the house will bloom finely in February.

Roses, headed in as we directed last month, will now begin to make new shoots. Keep them free from the green fly by smoking with tobacco, and from the red spider by fumigating with sulphur. Syringe freely, twice a day, in fine sunny weather.

Herbaceous plants of all kinds flower much better if protected with leaves, or coarse strawy manure.

Perpetual, Bourbon, and Noisette roses in the open ground will flower much better next year if the shoots are bent down and covered with manure.

Rhododendrons should be covered at the roots with leaves, and the tops, if in exposed situations, thatched with straw; attention to this will keep the foliage in finer condition.

Neapolitan violets in frames should be well protected, and covered so as to exclude all frost: air freely in all good weather, and an abundance of flowers may be gathered all winter.

Pansies in pots should be kept well watered, and placed near the glass.

Cactuses, with the exception of *truncatum* and its varieties, which are now blooming, should be kept quite dry and cool; on their treatment now depends their flowering the coming spring.

Abutilons in full flower may be shifted into larger pots, if fine specimens are wanted.

Ericas and *epacris*es growing vigorously, should have the tops nipped off to make them bushy specimens. Syringe freely in good weather.

